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PREFACE

A selected list of abbreviations and acronyms in use throughout the Jet Propulsion Laboratory has been compiled as a ready reference guide. This compilation includes:

1. NASA AND JPL facilities and organizations
2. Federal Government agencies
3. International organizations
4. Engineering and scientific associations and societies
5. Commercial organizations
6. Words and phrases with technical and financial applications.

Abbreviations and Acronyms are used to save space and to avoid distracting the reader by a needless spelling-out of repetitious words and phrases. Excessive use, however, should be avoided, and it is obvious that many in this list are complicated and unnecessary but have crept into the system. A term should never be abbreviated unless it is:

- (1) Used repeatedly, or
- (2) more commonly used in abbreviated form, or
- (3) to be established for future reference, or
- (4) to fit limited layout or drawing space

Each abbreviation or acronym should appear in the spelled-out form followed by the short form in parenthesis, at first usage. In any one document only one meaning should be used for a given abbreviation and only one abbreviation for a given term.

Control of this list is vested in the Library. Deletions or additions to be incorporated in subsequent revisions should be either mailed to the JPL Library, Bldg. 111-113 or telephoned to ext. 4407.

AA	Associate Administrator (NASA)	ADRAN	computer function at Cape Kennedy	AHSE	assembly, handling, and shipping equipment
AAAS	American Association for the Advancement of Science	ADS	Advanced Data System	AIAA	American Institute of Aeronautics and Astronautics
AAAS	Automated Attendance Accounting System (JPL)	ADS	advanced data scalar	AIBS	American Institute of Biological Sciences
AAC	automatic aperture control	ADS	Angle Data Subsystem	AID	Associated In-Group Donors
AAD	Deputy Associate Administrator (NASA)	ADSS	Automatic Data Switching System (DSN)	AIGS	All-Inertial Guidance System
AAFE	Advanced Application Flight Experiments	AE	Building AE, Cape Kennedy (Vehicle Telemetry Laboratory)	AIL	Airborne Instrument Laboratories
AAP	Affirmative Action Program (JPL)	A&E	architectural and engineering	AILSS	Advanced Integrated Life Support System
AAP	Apollo Applications Program	AEC	Atomic Energy Commission	AIM	analog input module
AB	acquisition beacon	AEDC	Arnold Engineering Development Center	AIME	American Institute of Mining, Metallurgical, and Petroleum Engineers
ABETS	Airborne Beacon Electronic Test Set	AEI	azimuth error indicator	AIMP	Anchored Interplanetary Monitoring Platforms
ABL	Automated Biological Laboratory	AEROSOL	Aerospace Spin-Off Laboratory	AIP	American Institute of Physics
AC	air conditioning	AES	Apollo Extension Systems	AIS	Analog Instrumentation Subsystem (DSIF)
AC	aircraft	AET	actual elapsed time	ALARM	Alerting, Long-Range Airborne Radar for Moving Targets
AC	Attitude Control Subsystem (S/C)	AFB	Air Force Base	ALASKA	Fairbanks, Alaska, NASA STADAN Station
A-C	Atlas-Centaur	AFC	automatic frequency control	ALD	Assistant Laboratory Director
ACCW	alternating-current continuous wave	AFCO	automatic fuel cutoff	ALPS	Advanced Liquid Propulsion Systems
ACE	attitude-control electronics	AFCP	Advanced Flight Control Programmer	ALS	advanced lunar studies
ACE	automatic checkout equipment	AFCRC	Air Force Cambridge Research Center		
ACF	analog computer facility	AFCRCL	Air Force Cambridge Research Center Laboratories		
ACIC	Aeronautical Chart and Information Center	AFETR	Air Force Eastern Test Range		
ACMO	Assistant Chief of Mission Operations				

ACI	Ascension Island (U.S.), NASA MSFN Station	AFFTC	Air Force Flight Test Center (Edwards AFB, Calif)	ALSEP	Apollo Lunar Surface Experiments Package
ACQ	Acquisition Aid Subsystem (DSIF)	AFIDS	Automatic Firearms Identification System (JPL)	alt	altitude
acq	acquisition			ALTE	altitude error
ACS	Administrative Computing Service	AFLC	Air Force Logistics Command	ALU	arithmetic and logic unit
ACS	Analysis Computer System	AFMDC	Air Force Missile Development Center	AM	amplitude modulated
ACS	Attitude Control Subsystem (VOS)			AM	amplitude modulation
ACTS	Analog Conditioning and Test System (MCC)	AFO	announcement of flight opportunity	AM	Building AM, Cape Kennedy (S/C Checkout Facility No. 1)
ACTS	Area Communications Terminal Subsystem (GCF)	AFOSR	Air Force Office of Scientific Research	AMC	Aeromedical Monitor Console
ACV	amount of critical view	AF/RADC	Air Force Rome Air Development Center	AMF	Area Maintenance Facility (DSIF)
AD	Deputy Administrator (NASA)	AFS	Air Force Station	AMMP	Advanced Manned Missions Program (NASA)
AD	advanced development	AFSC	Air Force Systems Command	AMO	air mass zero
A-D	analog-to-digital	AFSC/SSD	Air Force Systems Command Space Systems Division	ampl	amplifier
ADA	Angle Data Assembly (DSIF)			AMPS	Adaptive Mode Planning System (computer program)
ADAPS	Automatic Display and Plotting System	AFWTR	Air Force Western Test Range	AMPS	Advanced Maneuvering Propulsion System
ADAPTS	Air-Delivered Anti-Pollution Transfer System	AGARD	Advisory Group on Aeronautical Research and Development	AMPSIN	AMPS Input (360/75 computer program)
ADC	Analog-to-Digital Converter Assembly	AGC	amplitude gain control	AMR	altitude-marking radar
ADF	automatic direction finding	AGC	automatic gain control	AMS	Aerospace Material Specifications
ADP	automatic data processing	AGCM	Automatic Gain Control Calibration (computer program)	AMTD	automatic magnetic tape dissemination
ADPE	automatic data processing equipment	AGCP	Automatic Gain Calibration Program	AMWA	Area Microwave Assembly (GCF)
ADPRO	Automatic Data Processing Requirements Office (JPL)	AGE	aerospace ground equipment	A-N	alpha-numeric
ADRAC	automatic digital recording and control	AGN	additive gaussian noise	ANL	Argonne National Laboratory (AEC)
		AGNQ	Apollo/GOSS Navigation Qualifications	ANP	aircraft, nuclear powered
		AGS	Abort Guidance Subsystem		

ANSI	American National Standards Institute	ARIS	Advanced Range Instrumentation Ship	ATM	antenna test model
ANT	Antenna Mechanical Subsystem (DSIF)	ARP	Aerospace Recommended Practices	ATM	Apollo Telescope Mount
ANT	Antigua Island (U.K.), USAF ETR Station 91	ARPA	Advanced Research Projects Agency	ATP	Acceptance Test Plan
ant	antenna	ARS	analog recording system	ATR	attenuated total reflectance
AO	auxiliary oscillator	ARTC	Articulation Control Subsystem (VOS)	ATS	Administrative Terminal System (IBM 1440/1460)
AO	Building AO, Cape Kennedy (S/C Checkout Facility No. 2)	ARTU	Automatic Range Tracking Unit	ATS	Angle Tracking System (DSIF)
AODP	Acquisition Orbit Determination Program Assembly (SFOF)	ARU	attitude reference unit	ATS	Applications Technology Satellite
AOP	Assembly and Operations Plan	AS	aerospace standards	att	attitude
AOS	acquisition of signal	ASA	Acoustical Society of America	ATTPO	Advanced Transport Technology Program Office (NASA)
AOSD	Aeronautical Operating Systems Division (NASA)	ASC	Ascension Island (U.K.), USAF ETR Station 12	ATTREF	Attitude Reference Program (7094)
AOSO	Advanced Orbiting Solar Observatory	ASC	auxiliary switch closed	ATWS	Automatic Track While Scanning
AOU	azimuth orientation unit	ASCI	American Standard Code for Information Interchange	ATZ	acquisition trigger at zero beat
AP	Acquisition Plan	ASI	advanced scientific instruments	AU	astronomical unit (equal to average distance Earth to Sun)
AP	Apollo Program (NASA)	ASL	Association of Standards Laboratories	AUAIP	Aeronautics Upper Atmosphere Impact Program (NASA)
APA	Allowance for Project Adjustment	ASME	American Society of Mechanical Engineers	AUDRI	Automated Drug Identification
APAC	antenna pointing angle change	ASMS	Advanced Surface Missile System	aux osc	auxiliary oscillator
APC	automatic phase control	ASMS	American Society for Mass Spectrometry	AVA	average alarm
APD	Aeronautical Propulsion Division (NASA)	ASO	Auxiliary Switch Open	AVBS	absolute value bit synchronizer
		ASORF	Apollo Ship's Operational Readiness Force	AVC	automatic volume control
				AVCS	Advanced Videcon Camera System
				AVIS	Automatic Visual Inspection System
				A/VSA	altimeter/velocity sensor antenna (RADVS)

APL	Hopkins University)	ASP	actual ship position	AWACS	Airborne Warning and Control System
APMT	Approved Parts List	ASPP	antenna solar panel positioner	AWS	Area Working Standards
	Advanced Planetary Mission Technology	ASR	automatic send and receive (teletype equipment)	az	azimuth
APP	Advanced Planetary Probe	ASRDI	Aerospace Safety Research and Data Institute	az-el	azimuth-elevation (type of antenna mounting)
APP	Antenna Position Programmer Subsystem (MSFN)	ASSET	Aerothermodynamic Structural Systems Environmental Tests	BAP	band amplitude product
APS	Antenna Pointing Subsystem (DSIF)	assy	assembly	BART	Bay Area Rapid Transit (San Francisco)
APS	Ascent Propulsion System	AST	Advanced System Technology	BAT	Biomedical Application Team (NASA)
APS	Auxiliary Power Supply	AST	Assembly and Structure Test	BB	breadboard
APT	automatic picture transmission	ASTEC	Advanced Solar Turbo-Electric Conversion System	BBB	baseband breadboard
APTIC	Air Pollution Technical Information Center	ASTM	American Society for Testing Materials	BC	binary counter
APTS	Automatic Picture Transmission System	ASTRA	Astronomical and Space Techniques for Research on the Atmosphere	BC	bolometric correction
APU	Auxiliary Power Unit	ASWA	Audio Switch Assembly (GCF)	BC	boresight camera
A/PW	analog to pulse width	AT	acceptance tests	BCC	body-centered cubic *
A/PW	analog to pulse width converter	AT	ambient temperature	BCD	binary-coded decimal (information code)
AQL	acceptable quality level	ATC	Analog Technology Company	BCE	bench checkout equipment
ARC	Ames Research Center (Moffett Field, California)	ATC	Assistant Test Chief	BCF	beam correction factor
ARD	Aeronautical Research Division (NASA)	ATCL	acceleration-type control law	BCR	battery charge regulator
ARE	antenna range equipment	ATD	Aerospace Technology Division (Library of Congress)	BDA	Bermuda (U.K.), NASA MSFN Station
ARG	antenna range equipment (DSIF)	ATE	Area Test Equipment (DSIF)	BDA	Block Decoder Assembly (DSIF, SFOF)
ARIA	Apollo Range Instrumentation Aircraft (DOD ETR)	ATEGG	advanced turbine engine gas generator	BDC	binary decimal counter
				BDL	bad data lister

BDP	Business Data Processing (JPL)	BSMF	bit sync matched filter	CCC	Computer Control Corporation
BDXR	block demultiplexer (GCF)	BSR	Bulk Shielding Reactor (Oak Ridge, Tenn.)	CCD	Central Command Decoder (Spacecraft Assembly)
BECO	booster engine cutoff	BT	burn time	CCE	Change Control Engineer
BEL	bus-Earth tracking station link	BTAM	basic telecommunications access method	CCF	Central Computing Facility (SFOF)
BEOP	best estimate of orbital parameters	BTF	bench-test fixture	CCGA	Communications Control Group Assembly (GCF)
BER	bit error rate	BTL	Bell Telephone Laboratories	CCIG	cold cathode ion gauge
BET	best-estimate trajectory	BTL	below the line (budget)	CCIR	Consultative Committee for International Radio
BF	back focal	BU	backup	CCMD	coded command
B-FACT	Booster Flight-Acceptance Composite Test (AFETR)	B/U	backup (alternate for BU, used by JPL convention)	CCN	Central Command Network
BFEC	Bendix Field Engineering Corporation	BUD	beneficial use date	CCN	command confirmation
BFO	beat-frequency oscillator	BW	bandwidth	CCO	current-controlled oscillator
BFY	budget fiscal year	BWPA	backward-wave power amplifier	CCR	closed-cycle refrigerator
BH	blockhouse	BWR	bandwidth ratio	CCS	Command Control System
BIH	built-in hold (during countdown)	byte	a group of bits usually operated on as a unit (representation of a character)	CCS	Computer Command Subsystem
BIH	International Bureau of Time, Paris (Bureau International de l'Heure)	°C	degrees Celsius (Centigrade)	CC&S	central computer and sequencer
BIOS	biological investigation of space	CA	constant amplitude	CCTL	code clock transfer loop
BIS	British Interplanetary Society	cab	cabling	CCTV	closed-circuit television
bit	binary digit	CAD	computer adaptor display	CCU	convolutional coding unit
BLC	boundary-layer control	CADDC	Central Analog Data Distribution and Computer System	CCW	counterclockwise
BLDT	Balloon Launched Decelerator Test	CADFISS	Computation and Data Flow Integrated Subsystem	CD	circular dispersion
BLDTV	Balloon Launch Drop Test Vehicle	CAE	Computer-Assisted Entry	CD	command decoder
BLH	Baldwin-Lima Hamilton			CDA	Circuit Distribution Assembly (GCF)
BM	bending moment				
B/M	bill of material				

BMXR	block multiplexer (GCF)	CAG	Canopus Acquisition Gate	CDA	Convolutional Decoder Assembly (DSIF)
BNL	Brookhaven National Laboratory (AEC)	CAI	Command System Operations Analysis Group Area (SFOF)	CDC	Central Document Control (JPL)
BO	beneficial occupancy	CAL	Computer-Assisted Instruction Point Arguello, California, DOD	CDC	Command and Data Handling Console
B-O	buy-off	calbr	MSFN Station	CDC	Command Data Console
BOB	Bureau of the Budget	Caltech	calibration	CDC	Control Data Corporation
BOD	beneficial occupancy date	CAL	California Institute of Technology	CDDT	Countdown Demonstration Test
BOF	bias oscillator frequency	CAM	computer address matrix	CDE	Cognizant Development Engineer
BOL	beginning of life	CANEL	Connecticut Advanced Nuclear Engineering Laboratory (AEC)	CDHC	Command and Data Handling Console
BONUS	boiling nuclear superheat reactor	CAO	Crimean Astrophysical Observatory	CDP	central data processor
BOSS	Bioastronautical Orbiting Satellite	CAPA	Corrosion and Protection Association	CDP	command data processor
BP	bandpass	Capcom	Capsule Communicator	CDR	Critical Design Review
BP	Bioscience Program (NASA)	CARVON	Carnarvon, Australia, NASA	CDS	circuit data sheet
BPA	Bioshield Power Assembly		STADAN Station	CDS	Computer Data System (Univac 1218 or 1219)
BPFA	Bioshield Pyrotechnic Control Assembly (MVM S/C)	CAT	clear air turbulence	CDSA	Circuit Distribution Assembly (GCF)
BPF	bandpass filter	CAT	Complementary Analysis Team	CDT	Central Daylight Time
BPI	bits per inch	CATS	computer-accessed telemetry system	CE	Cognizant Engineer
BPS	bits per second	CAV	composite analog video	CE	common emitter
BPT	breakpoint	CB	circuit breaker	CE	control electronics
BR	booster-regulator	C-band	frequency band between 3.90 and 6.20 GHz	CEA	circular error average
BRD	Booster Requirements Document	CC	Comm Chief	CEA	Commissariat a l'energie Atomique (France)
BRD	Broadband Subsystem (DSS 41)	C&C	command and control	CEC	Consolidated Electrodynamics Corporation
BRS	binary ring sequence	CCB	Change Control Board		
BS	bit sync	CCC	Cape Communications Control	CEDAU	cruise/entry data acquisition unit
BSG	bit-sync generator	CCC	Central Computing Complex	CEER	Cost Estimate Error Report
BSI	British Standards Institution	CCC	Communication Center Console		
BSM	basic subsystem module				

CEIS	Cost Estimate Input Sheet (JPL)	CMDSW	Command Software Subsystem (SFOF)	COSMIC	Computer Software Management and Information Center (Computer Center, University of Georgia, Athens, Ga.)
CEN	Central Datum	CMF	Cartesian mapping function		
CEP	circle end point	CMF	Complex Maintenance Facility (DSIF)	COSPAR	Committee on Space Research, International Council of Scientific Unions
CEP	circular error, probable	CMI	computer-managed instruction		
CEP	Continuous Estimation Program	CMMA	Custom-Metallized Multi-Gate Array		
CEQ	Council on Environmental Quality	CMO	Chief of Mission Operations	COTAR	Correlated Orientation Tracking and Range System
CERL	Cambridge Electromagnetic Radiation Laboratory	CMO	Contract Management Office (JPL)		
CERN	European Organization for Nuclear Research	CMOS	complementary metal-oxide semiconductor	COSWA	Conferences on Science and World Affairs
CESO	Council of Engineers and Scientists Organizations	CMP	Command Module Pilot (Apollo)	CP	calibration procedure (DSIF)
CETS	European Conference on Satellite Communication	CMR	common-mode rejection	CP	candlepower
CF	carrier frequency	CMTM	Capsule Mechanical Training Model	CP	central point
CF	conversion factor	CMU	controls mock up	CP	chemically pure
CFE	contractor-furnished equipment	C:N	carrier-to-noise ratio	CP	chemical polarization (DSIF)
CFF	critical flicker frequency	CNI	Committee for Nuclear Information	CP	communications processor (SFOF, 490)
CFR	Code of Federal Regulations	cntrwt	counterweight		
CFS	central frequency synthesizer	CNV	Cape Kennedy, USAF ETR Station 1	CP	Communications Programs (NASA)
CFT	complex Fourier transform			CP	Control Point (JPL security)
CFU	central firing unit	CO	checkout	C-P	Cartesian to polar
CG	Center of gravity	CO	crystal oscillator	C&P	Capabilities and Procedures
Ch	channel (to be used only before designator)	CO	Spacecraft Coordinator	CPA	closest point of approach
CHC	corrected headcount	CO	change order	CPA	color phase alternation
CI	Center of Impact	CODASYL	Committee for Data Systems Languages	CPA	critical path analysis
				CPAF	Cost Plus Award Fee

CIA	Communications Interface Assembly (DSIF)	CODATA	Committee on Data for Science and Technology	CPCC	Communications Processor Conversion Center
CIC	computer interface control (part of DTV computer)	CODSIA	Council of Defense/Space Industrial Association	CPD	contact potential difference
CIF	Central Instrumentation Facility (KSC)	COE	Cognizant Operations Engineer	CPE	circular probable error
CINDA	Chrysler Improved Numerical Differencing Analyzer	COEPL	Cognizant Operations Engineer's Parts List	CPFF	Cost Plus Fixed Fee
CINDA	computer index of neutron data	CO-I	Co-Investigator	CPI	characters per inch
CIRES	Cooperative Institute for Research in Environmental Sciences	COINOPS	counterinsurgency operations	CPI	clock pulse interval
CJMA	Communications Junction Module Assembly (GCF)	COL	Capsule-Orbiting Bus Link	CPRA	Communications Processor Assembly (GCF)
CKAFS	Cape Kennedy Air Force Station	COLIDAR	coherent light radar	CPS	Central Processing System (SFOF)
CLETS	California Law Enforcement Telecommunications System	coll	collimation	CPS	Communications Processing System
CLT	Communications Line Terminal	COM	computer output microfilm	CPU	central processing unit
CM	Celestial Mechanics	COMB	command confirmation buffer	CPV	Canopus probe near limb of Venus angle
CM	Command Module (Apollo)	Corngen	Command Generation Program (Mariner)	CR	Central Recorder Subsystem
CM	composite merge	comm	communications	CR	Change Request
CMA	Command Modulator Assembly (DSIF)	COMP	Computation Subsystem (SFOF)	CRA	Community Redevelopment Agency
CMD	Command Data System (SFOF)	comp	computer	CRAM	Computerized Reliability Analysis Method
CMD	Command System (DSN, DSIF)	Compac	Commonwealth Transpacific (submarine cable in Pacific)	CRDF	cathode-ray direction finder
cmd	command	compl	complete	CRE	cross-range error
CMD CC	Command Computer Console	Comsat	Communications Satellite	CRFS	Combined Reference Frequency System
cmdmsg	command message	COMSOC	Communications Spacecraft Operations Center (GSFC)	CRO	Carnarvon, Australia, NASA MSFN Station
		Conscan	Conical Scan System (Pioneer F & G)	CRO	cathode-ray oscilloscope
		COSATI	Committee on Scientific and Technical Information	CRP	Change Review Panel
				CRS	Central Recorder Subsystem (S/C)

CRSS	critical resolved shear stress	D-A	digital-to-analog	DC-V	direct command-(Mariner Venus 67)
CRT	cathode-ray tube	DAA	Division Administrative Assistant	DDA	Data Decoder Assembly (DSIF, SFOF)
CRT	Composite Readiness Test	DAC	data acquisition center	DDA	Development Display Assembly (DSIF, MVM 73 MDE)
CRT	cosmic ray telescope	DAC	digital-to-analog converter	DDC	Defense Documentation Center
Cryo	cryogenic	DACO	Data Consistency Orbit	DDC	Direct Data Channel (SFOF IBM 7044 to 7094 Interchange)
CS	communications switcher	DACON	Data Controller (SFOF)	DDF	Director's Discretionary Fund
CSA	character scan or alternate	DAE	data acquisition equipment	DDFT	design, development, fabrication, testing
CSAD	capsule system advanced development	DAE	data automation equipment	DDJ	digital differencing junction
CSAR	communication satellite advanced research	DAF	Data Analysis Facility	DDR	Development Discrepancy Report
CSD	Configuration Standardization Document (DSIF)	DAL	Data Analysis Laboratory	DDT	digital demodulation technique
CSE	Cognizant Sustaining Engineer	DAP	digital autopilot	DDU	digital display unit
CSF	character scan or fail	DAPFS	direct-ascent powered-flight simulation	DE	data encoder
CSIR	Council for Scientific and Industrial Research (South Africa)	DAPU	Data Acquisition and Processing Unit (VOS)	DE	development ephemeris
CSM	Command and Service Module (Apollo)	DART	Decomposed Ammonia Radioisotope Thruster	dec	declination
CSP	Communications Satellite Program (NASA)	DART	Dynamic Simulation of Auto and Passenger Rail Transports	decom	decommutator
CSR	Clock-Sync Receiver Assembly (DSIF)	DAS	Data Accountability System (capability within JPLOS)	decomm	decommutation
CSSL	Continuous System Simulation Language	DAS	data acquisition system	demod	demodulator
CST	Central Standard Time	DAS	Data Automation Subsystem (Mariner S/C)	demux	demultiplexer
CST	Combined Systems Test	DAVC	delayed automatic volume control	DEP	deflection error probable
		DB	decibel	DEPD	Division Engineering Planning Document
		DBA	decibel, adjusted	DEPI	Differential Equations Pseudo-Code Interpreter (JPL computer routine)

CT	center tap	DBI	decibels antenna gain referred to isotope antenna	DEV	Design Evaluation Vehicle
CTA 21	Compatibility Test Area, JPL, Pasadena, California	DBM	decibels referred to 1 milliwatt	DEW line	Distant Early Warning line
CTL	carrier tracking loop	DBW	decibels referred to 1 watt	DF	direction finder
CTM	Cognizant Technical Manager	DC	direct command	DFIS	dual filament ion source
CTM	Contract Technical Manager	DC	discrete command	DFL	display formatting language
CTP	coded telemetry processor	DCA	data decoder assembly	DFM	dual-frequency method
CTS	Central Timing System	DCAA	Defense Contract Audit Agency	DFR	dual-frequency receiver
CTS	Range Instrumentation Ship (Twin Falls) S-band antenna system	DCAS	Data Collection and Analysis System (GSFC)	DFVLR	German Institute for Aerospace
CTV	control test vehicle	DCASR	Defense Contract Administration Services Region	DHPE	Data Hardware Project Engineer
CUE	Cognizant User Engineer (DSN Tracking System Operations)	DCC	Data Communication Channel (SFOF IBM 7288)	DIA	digital isolation amplifier
CVR	command verification	DCC	Data Condition Code	dia	diameter
CVR/D	command verification/drop (data exit mode)	DCC	Document Control Chief	Diags	Diagnostic Program
CVT	command verify/transmit	DCES	DSS Communications Equipment Subsystem (GCF)	DIA-LOGICS	Document Indexing and Listing of Graphic Information Codes System (JPL)
CVT	Configuration Verification Test	DCH	Data Chief	Diamon	Diagnostic Monitor (SFOF CPS)
CW	carrier wave	DCOS	Direct Couple Operating System	DIC	data insertion converter
CW	clockwise	DCR	Daily Communication Report	DID	data identification (HSD/WBD)
CW	continuous wave	DCS	data conditioning system	DIRAM	Digital Range Machine
CY	calendar year	DCS	data conversion system	DIS	Data Input System (of Computer Data System)
CZ	communications zone	DCS	digital command system	DIS	Digital Instrumentation Subsystem (DSIF)
CZR	strip film camera	DCT	data communications terminal	DISCO	Defense Industrial Security Clearance Office
D ₁	one-way doppler detection	DCT	DSS Communications Terminal Subsystem (GCF)	DIT	Documentation Implementation Team (DSN)
D ₂	two-way doppler detection	DCU	distribution control unit	dk	docked
D ₃	three-way doppler detection				
DA	double amplitude				

DL	data link	DPST	double-pole single-throw (switch)	DSS 51	Johannesburg Deep Space Station, Johannesburg, Republic of South Africa
DL	downlink	DPT	Descent Performance Test		
DL	Direct Labor	DPT	Design Proof Test		
DLA	declination of outgoing asymptote	DPTRAJ	Double-Precision Trajectory Program	DSS 61	Robledo Deep Space Station, Madrid Complex, Robledo de Chavela, Spain
DLL	design load limit	DQM	data quality monitor		
DLM	depot-level maintenance	DR	data requirements	DSS 62	Cebreros Deep Space Station, Madrid Complex, Cebreros, Spain
DLRV	Dual-mode Lunar Roving Vehicle	DR	Discrepancy Report		
DLT	direct labor time	DRD	data requirements description	DSS 63	Rio Cofio Deep Space Station, Madrid Complex, Rio Cofio, Spain
D/M	demodulator/modulator	DRD	differenced-range doppler		
DMC	discrete memoryless channel	DRD	Division of Reactor Development (AEC)	DSS 71	Spacecraft Compatibility/Monitor Station, Cape Kennedy, Florida
DMC	DSIF Monitor and Control Subsystem (DSIF Mark III)	DRE	down-range error		
DME	distance measuring equipment	DRK	data request keyboard	DSTA	Distribution Assembly (GCF)
DMF	DSIF Maintenance Facility	DRL	Data Requirements List (JPL)	DT	digital tracker
DMM	dedicated man/months (JPL)	DRN	Document Release Notice (JPL)	DTC	DSIF Telemetry and Command Subsystem (Mark III)
DMO	Data Management Office (JPL)	DRS	Digital Recording System		
DMP	Data Management Plan (JPL)	DRS	Discrepancy Reporting System	DTC	display timing control
DMPI	desired mean point of impact	DRVID	Differenced Range Versus Integrated Doppler (charged particle measurement)	DTF	DSIF Testing Facility
DMS	data multiplex system			DTG	date/time group
DN	data number	DSB	double sideband	DTL	diode-transistor logic
DNA	deoxyribonucleic acid	DSBSC	double-sideband suppressed carrier	DTM	Design Test Model
DOA	dioctyl adipate	DSC	differential scanning calorimeter	DTM	Developmental Test Model
DOB	Data Operations Branch	DSC	differential scanning calorimetry	DTM	Dynamic Test Model (S/C)
DOD	Department of Defense	DSC 10	Goldstone Deep Space Communications Center	DTO	detailed test objective
DOD	depth of discharge			DTR	digital tape recorder
DODGE	Dept. of Defense Gravity Experiment	DSCC	Deep Space Communications Complex	DTS	Digital Tracking System
DOP	Detailed Operating Procedure				

DORAN	doppler ranging system	DSD	Data Status Display (SFOF DPCS)	DTS	Digital Tracking Subsystem
DOS	Department of Supply (Australia)	DSD	DSIF Supply Depot	DTS	DSIF Tracking and Monitor & Control Subsystem
DOS	disk operating system	DSDP	Data System Development Plan	DTSP	DTS I/O Processor Assembly (DSIF)
DOT	Department of Transportation	DSE	data storage equipment	DTTL	data-transition tracking loop
DOT	dynamic operation test	DSE	development support equipment	DTU	data transmission unit
DOW	Department of Works (Australia)	DSI	Data System Integration (Mariner)	DTV	Digital Television (SFOF)
DOY	day of year	DSIF	Deep Space Instrumentation Facility	DU	Documentation Unit
DP	data processing	dsky	display and keyboard	DUN	data users' note
DP	dew point	DSM	data storage memory	DV	digital video
DP	double-pole (switch)	DSN	Deep Space Network	DVB	divinylbenzene
DPA	Data Processing Area	DSS	Data Storage System (S/C)	DVDS	digital video display system
DPCA	Data Processing Control Area (SFOF)	DSS	Deep Space Station	DVM	digital velocity meter
DPCC	Data Processing Control Center (SFOF)	DSS 11	Pioneer Deep Space Station, Goldstone Complex, Barstow, California	DVM	digital voltmeter
DPCC	Data Processing Control Console (SFOF)	DSS 12	Echo Deep Space Station, Goldstone Complex, Barstow, California	DVP	Data Validation Program
DPDT	double-pole double-throw (switch)	DSS 13	Venus Deep Space Station, Goldstone Complex, Barstow, California	DWS	Depot Working Standards
DPE	dynamic phase error	DSS 14	Mars Deep Space Station, Goldstone Complex, Barstow, California	DXD	distortion analyzer
DPLF	data phone line formatter	DSS 41	Woomera Deep Space Station, Woomera, Australia	DYSTAL	dynamic storage allocation
DPLF	digital phone line formatter	DSS 42	Weemala Deep Space Station, Tidbinbilla Complex, Canberra, Australia	E	east (longitude)
DPODP	Double-Precision Orbit Determination Program	DSS 43	Ballima Deep Space Station, Tidbinbilla Complex, Canberra, Australia	E	encounter + (time)
DPPE	Data Processing Project Engineer			E	time of encounter
DPS	Data Processing System (SFOF)			(E)	experimental
DPS	Descent Propulsion System			EA	electronic assembly
DPS	digital phase shifter			EAM	electronic accounting machine
DPSS	Data Processing Switching System (SFOF)			EAM	electronic automatic machinery
				EASL	Experimental Assembly Sterilization Laboratory
				EAT	Engineering Analysis Team

EB	engine burn	EIN	external interlace	EPIC	Extraterrestrial Photographic Information Center (Goddard)
EBCD	extended binary coded decimal (information code)	el	elevation	EPO	Earth-parking orbit
EBRG	Earth-based radio guidance	ELACS	Extended Life Attitude Control Subsystem	EPPL	Electronic Preferred Parts List (JPL)
ECA	Engineering Change Authorization	ELAS	equilibrium problems of linear structures	EPPO	Earth Physics & Physical Oceanography Program (NASA)
ECAP	Electrical Circuit Analysis Program	ELDMK	Earth landmark	EPR	electron paramagnetic resonance
ECC	Emergency Communication	ELDO	European Launcher Development Organization	EPR	ethylene propylene rubber
ECC	Engineering Change Control	elec	electronics	EPS	Earth-probe-sun (angle)
ECC	Error Correction Code	ELF	early lunar flare	EPS	emergency power supply
ECI	Earth-centered equatorial inertial	ELF	extremely low frequency	EPV	Earth probe near limb of Venus angle
ECI	Engineering Change Instruction	ELSSE	electronic sky-screening equipment	EPUT	events per unit time
ECM	electronic countermeasures	ELSSE	electronic sky screen — range safety	eq	equation
ECO	Engineering Change Order	EM	electromagnetic	EQL	Environmental Quality Laboratory (Caltech)
ECP	Engineering Change Proposal	EM	engineering model	EREPP	Earth Resources Experiment Packaging Program (NASA)
ECR	Engineering Change Request	EMC	electromagnetic compatibility	ERIC	Educational Resources Information Center
ECR	Engineering Change Requirement	EMC	equivalent mission cycle	ERP	effective radiated power
ECS	engine control system	EMF	Equipment Maintenance Facility (DSIF)	ERS	Earth Resources Satellite
ECS	environmental control system	EMI	electromagnetic interference	ERSFP	Earth Resources Survey Flights Program (NASA)
ECU	electrical conversion unit	EMSL	Electronic Material Sciences Laboratory (Div. of AF Cambridge Research Center)	ERSP	Earth Resources Survey Program (NASA)
ED	engineering document	EMU	engineering mock up		
ED	explosive device	ENEA	European Nuclear Energy Agency		
EDA	Economic Development Administration				
EDED	error detection encoder-decoder (GCF)				
EDIT	Editor Assembly (SFOF)				

EDMS	Engineering Data Management System (JPL)	ENIAC	Electronic Numerical Integrator and Computer (Univ. of Penn.)	ERTS	Earth Resource Technology Satellite (Redesignated Earth Observation Satellite, EOS)
EDP	electronic data processing	EO	extended operations	ESA	explosive-safe area
EDPLOT	Engineering Data Plotting (computer program)	EOB	end of block	ESCA	electron spectroscopy for chemical analysis
EDR	Experiment Data Record	EOCY	end of calendar year	ESED	Environmental System & Effects Division (NASA)
EDS	entry data subsystem	EOF	end of file	ESF	explosive-safe facility
EDT	Eastern Daylight Time	EOFY	end of fiscal year	ESG	electrostatically suspended gyro
EED	electroexplosive device	EOL	end of life	ESLO	European Space Launcher Organization
EF	emergency fix	EOM	end of message	ESR	electron spin resonance
EFL	effective focal length	EOM	end of mission	ESRO	European Space Research Organization
EFL	equivalent focal length	EOM	energize output M (SDS symbol language)	ESS	Emplaced Science Station
EFR	Equipment Failure Report	EOP	Earth Observations Programs (NASA)	EST	Eastern Standard Time
EFS	Earth-fixed system	EOPS	ETR Operations	ESTEC	European Space Technical Center
EGADS	Electronic Ground Automatic Destruct Sequencer	EOS	Earth Observation Satellite	ESV	Earth satellite vehicle
EGO	Eccentric-Orbit Geophysical Observatory	EOS	Electro-Optical Systems, Inc.	ET	Ephemeris Time
EGSE	Electronic Ground Support Equipment	EOSS	Earth Orbiting Space Stations	ETA	estimated time of arrival
EHD	electrohydrodynamics	EOT	Earth-Observed Time	ETC	Engineering Test Capsule
EHF	extremely high frequency (30 to 300 GHz)	EOT	end of tape	ETC	MSFN Test and Training Facility designator
EHV	extra-high voltage	EOT	end of test	ETE	Engineering Support Test Equipment (DSIF)
EI	Engineering Index	EOT	end of track	ETL	Environmental Test Laboratory (JPL)
EI	Engineering Instruction	EOY	end-of-year	ETM	Engineering Test Model
EI	exponential integral	EP	electrical prototype		
EIA	Electronic Industries Association	EP	Engineering Procedure		
		EP-3	energizing pressure 3 (battery pressure)		
		EPA	Environmental Protection Agency		
		EPD	Engineering Planning Document		

ETO	ephemeris-tuned oscillator	FLYBY	Flyby Fine Print (computer program)	FTS	Frequency and Timing Subsystem (DSIF)
ETO	ethylene oxide	FM	flight model	FTV	flight test vehicle
ETR	Environmental Test Report	FM	frequency modulated	FWHM	full width at half maximum
ETR	(see AFETR)	FM	frequency modulation	FY	fiscal year
ETS	Edwards Test Station (NASA)	FMECA	Failure Mode, Effect, and Criticality Analysis	GALCIT	Guggenheim Aeronautical Laboratory (California Institute of Technology)
ETV	engineering TV mode	FMFD	frequency modulation feedback discriminator	GAO	General Accounting Office
EU	engineering unit	FMM	Financial Management Manual (NASA)	GARP	Global Atmosphere Research Program
EVA	extravehicular activity	FMS	frequency-multiplexed subcarrier	GARP	Global Atmospheric Research Program
EVT	Engineering Verification Test	F/O	fuel to oxidizer ratio	GAT	Greenwich Apparent Time
EVT	extra-vehicular transfer	FOF	Flight Operations Facility	GBI	Grand Bahama Island (U.K.), USAF ETR Station 3
EWO	Engineering Work Order	FOG	Flight Operations Group	GC	gyro control
EWR	early warning radar	FOM	Field Operations Memorandum	G&C	guidance and control
EWU	Engineering Writing Unit	FOP	Financial Operating Plan	GCA	ground-controlled approach
EXAM-ETNET	Experimental Interamerican Meteorological Rocket Network	FOV	field of view	GCA	Gyro Control Assembly
exc	exciter	FPAA	Flight Path Analysis Area (SFOF)	GCAT	Guidance and Control Analysis Team (SFO)
EXEC-8	Executive Software Assembly (SFOF, 1108)	FPAC	flight path analysis and command	GCC	guidance and control computer
ext	external	FP&D	facilities planning and design	GCD	greatest common divisor
°F	degrees Fahrenheit	FPO	Future Projects Office (NASA)	GCF	greatest common factor
F1A	calibration curve weighted to correspond to the sensitivity of the human ear at various frequencies	FPR	Failure/Problem Report	GCF	ground command facility
FA	flight acceptance	FPR	flight performance reserve		
fab	fabricate	FPR	full propellant requirement		
fac	facilities	FPS	fixed-point station (type of radar)		
		FPS	flight power subsystem		
		FR	Failure Report		

FACT	Flight Acceptance Compatibility Test	FR	functional requirements	GCF	Ground Communications Facility
FACT	Flight Acceptance Composite Test	FR-1200,-1400,-2000		GCF-CS	Ground Communications Facility-Communications Switcher
farada	failure rate data		magnetic tape recorder models (DSIF)	GCISD	Guidance, Control and Information Systems Division (NASA)
FAT	Flight Acceptance Test			GCMS	gas chromatograph/mass spectrometer
FAV	full analog video	FRC	Federal Records Center	GCS	Ground Command System
FC	flight capsule	FRC	Flight Research Center (NASA)	GCSC	guidance control and sequencing computer
FCA	frequency control analysis	FRD	flight readiness demonstration		
FCC	Federal Communications Commission	FRF	flight readiness firing	GCT	guidance command test
FCE	flight control electronics	FRS	Flight Radio Subsystem	GCT	Greenwich Civil Time
FCEU	flight control electronics unit	FRT	Flight Rating Test	GD/C	General Dynamics/Convair
FCP	flight control programmer	FRT	flow-recording transmitter	GDHS	Ground Data Handling System
FCS	Flight Command Subsystem (S/C)	FS	full scale	GDS	geodetic data site
FCS	Flight Control Subsystem	FSC	fibrous sausage casing	GDS	Goldstone, California, NASA MSFN Station
FCSG	flight control sensor group	FSE	facility support equipment	GDSCC	Goldstone Deep Space Communications Complex
FCV	Flight Checkout Vehicle	FSE	Facility Systems Engineer	GDSX	Goldstone, California, NASA MSFN Station (at DSS 11)
FDM	frequency-division multiplex	FSK	frequency-shift keyed	GE	General Electric Company
FDS	Flight Data System (VOS)	FSK	frequency-shift keying	GEOS	geodetic satellite
FDX	full duplex (two-way)	FSM	frequency-shift modulation	GERT	Graphic Evaluation and Review Technique
FEDGE	finite element data generation	FSR	feedback shift register		
FEPS	Far-Encounter Planet Sensor	FTC	fast-time constant (circuit)	GET	ground elapsed time (since liftoff)
FET	field effect transistor	FTC	Federal Trade Commission	GFC	Glass Filter Covers
FET	functional element test	FTD	Flight Test Directive	GFE	government-furnished equipment
F-F	Flip-Flop	FTK	field test kit		
FFPI	flip-flop position indicator	FTMYRS	Fort Meyers, Florida, NASA STADAN Station		
FFT	fast fourier transform				
FIGS	figures (TTY upper case)	FTS	Federal Telecommunications System		
FIM	Field Instruction Memorandum	FTS	Flight Telemetry Subsystem (S/C)		
FL	focal length				

GFM	government-furnished material	GWM	Guam (U.S.), Marianas Islands, NASA MSFN Station	HRT	high-rate telemetry
GFP	government-furnished property			HRTS	High-Rate Telemetry System
GHA	Greenwich hour angle	HA	hour angle	HS	high speed
GHE	ground handling equipment	HAC	Hughes Aircraft Company	HSCF	Health Sciences Computing Facility (UCLA)
GIDEP	Government-Industry Data Exchange Program	HA-dec	hour angle-declination (type of antenna mounting)	HSD	high-speed data
GI FOR SS	Goddard Institute for Space Studies (NASA)	HAPO	Hanford Atomic Products Operations (AEC)	HSDA	High-Speed Data Assembly (GCF)
GLC	gas-liquid chromatography	HARP	High Altitude Research Programs	HSDL	high-speed data line
GLO	Goddard Launch Operations (NASA, Cape Kennedy, Florida)	HASP	Houston Automatic Spooling System	HSK	Honeysuckle Creek, Australia, NASA MSFN Station
glotrac	global tracking	HAT	horizontal alidade tie	HSKX	Weemala, Australia, NASA MSFN Station (at DSS 42)
GLPR	Goldstone predict (orbit identification)	HAW	Kokee Park, Kauai, Hawaii, NASA MSFN Station	HSRA	High-Speed Data Regeneration Assembly (GCF)
GM	ground mode	HAZ	heat-affected zones	HSS	High-Speed System (GCF)
GM	Geiger-Muller	HC	headcount	HTC	height-to-time converter
GM	gravitational constant	HC	high current	HTFMI	Heat Transfer and Fluid Mechanics Institute
GM	gravitational mass	HCF	highest common factor		
GMT	Greenwich Mean Time (Zulu time)	HD	high density	HUD	Dept. of Housing and Urban Development
GOE	ground operating equipment	HDR	high-density recorder (DSIF)		
GOE	Ground Operational Equipment (Pioneer Project)	HDW	hardware	HUMRRO	Human Resources Research Organization
GOE	ground operations equipment	HDX	half-duplex (both ways, but not simultaneously)	HVAC	high voltage alternating current
GOFAR	Global Ocean Floor Analysis and Research	HE	heat exchanger	HVC	high-voltage control
GOSS	Ground Operations Support System	HEAO	High Energy Astronomical Observatory	HVPS	high-voltage power supply
GP	galactic probe	HEF	high-energy fuel	HWT	hypersonic wind tunnel
GP	general purpose	HEPA	high-efficiency particulate air	hyd	hydraulic
		HEUS	high energy upper stage	Hz	Hertz (cycles per second)

GPI	ground position indicator	HEW	Dept. of Health, Education, and Welfare	IAA	International Aerospace Abstracts
GPO	general-purpose output (SFOF)			IAA	International Academy of Astronautics
GPO	Government Printing Office	HEX	hexadecimal - base 16 numbering system	IACS	International Arms Control Symposium
GPSP	general-purpose software program	HF	high frequency (3 to 30 MHz)	IAD	International Astrophysical Decade
GRAS	generally recognized as safe	HF/DF	high-frequency direction finding	IAF	International Astronautical Federation
GRE	ground reconstruction electronics	HFE	heat flow experiment	IAGA	International Association of Geomagnetism and Aeronomy
GRS	gamma-ray spectrometer	HGA	high gain antenna	IAIE	Inter-American Institute of Ecology
GRSP	General Range Safety Plan	HGAC	high gain antenna controller	IAMAP	International Association of Meteorology and Atmospheric Physics
GSA	General Services Administration	HI	heat index	IAPG	Interagency Advanced Power Group (NASA, AEC, and ARPA)
GSDS	Goldstone Duplicate Standard (DSIF)	HIG	Hermetically Sealed Integrating Gyroscope	IAPS	Interim Antenna Pointing Subsystem (DSIF)
GSE	ground-support equipment	HILAC	heavy-ion linear accelerator	IATV	Interactive Alphanumeric Television (SIMCEN)
GSFC	Goddard Space Flight Center (Greenbelt, Maryland)	HI-REL	high-reliability program	IAU	International Astronomical Union
GSMA	Goldstone-SFOF Microwave Assembly (GCF)	HON	Honolulu, Hawaii, NASCOM Switching Facility	IBM	International Business Machines Corporation
GST	Greenwich Sidereal Time	HP	Hewlett-Packard		
GTK	Grand Turk Island (U.K.), USAF ETR Station 7	HP	horsepower		
GTS	Ground Telemetry Subsystem (Mariner)	HP/LP	high power/low power		
GTS	ground test station	HPPS	Surveyor trajectory processor (computer program mnemonic)		
GTS	Goldstone Tracking Station	HPT	high-pressure tap		
GTV	ground transport vehicle	HPT	high-pressure test		
GUB	greatest upper bound	HPU	high-pressure unit		
		HRCF	Hardware Review Certification Form		
		HRF	high-resolution facsimile		

IBSYS	International Business Machines System	ILD	in-lock detector	IRFNA	inhibited red fuming nitric acid (missile fuel oxidizer)
IC	inductance-capacitance	ILLIAC	Illinois automatic computer (Univ of Ill)	IRG	integrating rate gyroscope
IC	integrated circuit	ILRV	Integrated Launch and Re-entry Vehicle	IRIA	Infrared Information and Analysis Center (Willow Run Laboratories of University of Mich)
IC	ionization chamber	ILRVS	Integrated Launch and Re-entry Vehicle System	IRIG	Inter-Range Instrumentation Group
ICARVS	Interplanetary Craft for Advanced Research in Vicinity of Sun	ILS	instrument landing system	IRIS	infrared interferometer spectrometer
ICD	Interface Control Document	ILS	International Latitude Service	IRR	infrared radiometer
ICDR	ion cyclotron double resonance	ILSE	Interagency Life Sciences Supporting Research and Technology Exchange	IRS	infrared spectrometer
ICEV	Initial Condition Evaluation (orbit identification)			IRS	intermediate reference structure
ICEV	injection condition evaluation (orbit identification)	IMCC	image motion compensation and calibration	IRTM	Infrared Thermal Mapper Subsystem (VOS)
ICR	inductance, capacitance, resistance	IMCC	Integrated Mission Control Center (MSC, Houston)	IRU	inertial reference unit
ICR	ion cyclotron resonance	IMLSS	integrated maneuvering and life support system	IRV	inter-range vector
ICRPG	Interagency Chemical Rocket Propulsion Group	IMP	Image Processing Program (computer program)	IS	isolated step
ICS	Internal Communication System (SFOF)	IMP	interim monitoring program	ISA	Interface Switching Assembly (DSIF)
ICS	Intra-communication system	IMP	intermodulation product	ISA	Instrument Society of America
ICST	Integrated Combined Systems Test	IMP	Interplanetary Monitoring Probe	ISAM	indexed sequential access method
ICSU	International Council of Scientific Unions	IMU	inertial measurement unit	ISAS	infrared small astronomical spacecraft
ICT	International Critical Tables	INTA	Instituto Nacional de Tecnica Aeroespacial (Spain)	ISCO	initial systems checkout
ICW	interrupted continuous wave			ISI	Instrumentation Support Instruction (GCF TWX)
ID	identification			ISL	Instrument Standards Laboratory (DSIF)

ID	identification data	Intelsat	International Telecommunications Satellite	ISO	International Organization for Standardization
ID	inside diameter				
IDA	Institute for Defense Analysis	I/O	input/output	ISO	isolation
IDAC	Integrated Data Acquisition and Control (JPL)	IOC	initial operational capability	iso amp	isolation amplifier
		IOC	interim operational capability	ISP	integrated shear plate
IDC	Internal Document Control	IOC	interoffice correspondence	IST	Integrated Systems Test
IDCPS	integrated dc power supply	IOM	interoffice memorandum	ISTS	Intersite Transmission Subsystem (GCF)
IDDP	isodecyl diphenyl phosphate	ION	ionospheric calibration program		
IDL	indentured drawing list	IOU	input-output-utility	ITB	Invitation to Bid
IDS	instrument data system	IP	input processor	ITD	interdata computers
IDS	integrated data store	IP	initial point	ITL	integrate, transfer and launch
IEC	integrated electronic control	IP	ionization potential	ITLC	instant thin layer chromatography
IECEC	intersociety energy conversion	IP	isolation pulse	ITS	integrated trajectory system
IEEE	Institute of Electrical and Electronics Engineers	IPL	image processing lab	IUCSTP	Inter-Union Commission on Solar Terrestrial Physics
		IPL	indentured parts list		
IF	intermediate frequency	IPL	initial program load	IUGG	International Union of Geodesy and Geophysics
IFAC	International Federation of Automatic Control	IPM	impulses per minute	IV	initial velocity
		IPM	incidental phase modulation	IV	intensifier vidicon
IGOR	Intercept Ground Optical Recorder	IPMS	International Polar Motion Service	IVT	intra-vehicular transfer
IGOSS	Integrated Global Ocean Station System	IPP	Impact Predictor Computer (Cape Kennedy)	JANAF	Joint Army-Navy-Air Force
				JAS	Job Accounting System
IGS	Inertial Guidance System	IPP	input processor programs	JBES	Jodrell Bank Experimental Station (Cheshire, England)
IGS	instrumentation ground system	IPS	inches per second		
IIP	instantaneous impact points	IQ SY	International Year of the Quiet Sun	J-box	junction box
IITRI	Illinois Institute of Technology Research Institute (formerly ARF)	IR	infrared	JCL	job control language
		IR	inspection report		(OS/360)
IL	in-lock	IRD	Interface Requirements Document	JCP	Joint Committee on Printing
IL	insertion loss	IRDG	Inter-Range Documentation Group		

J-FACT	Joint Flight Acceptance Composite Test	L-band	frequency band between 390 and 1550 MHz	LIBSYS	Library System (Computer Program)
JILA	Joint Institute for Laboratory Astrophysics	LBPO	Lifting Body Program Office (NASA)	LID	leadless inverted device
JM	Junction Module (DSIF)	LC	launch complex	LLM	Lunar Landing Mission
JOBURG	Johannesburg, Republic of South Africa, NASA STADAN Station	LC	Library of Congress	LLR	line of least resistance
J-OCT	Joint Operational Compatibility Tests	LCD	least common divisor	LLRV	Lunar Landing Research Vehicle
JOD	joint occupancy date	LCE	Launch Complex Equipment	LLSA	Land Lines Assembly (GCF)
JPL	Jet Propulsion Laboratory (Pasadena, California)	LCM	least common multiple	LLSV	Lunar Logistic Supply Vehicle
JPL/ETR	Jet Propulsion Laboratory Field Station, Air Force Eastern Test Range	LCOSE	Launch Complex Operational Support Equipment	LM	lunar module (Apollo)
J-T	Joule-Thompson	LCP	left (-hand) circular polarization	LMSC	Lockheed Missiles and Space Company (Sunnyvale, California)
JTF	Joule-Thompson flow	LCS	large capacity storage	LMT	local mean time
JTHP	Joule-Thompson high pressure	LCS	launch complex set	LNA	low-noise amplifier
JVA	jet vane actuators	LCTT	Launch Complex Telemetry Trailer	LO	local oscillator
°K	degrees Kelvin	LD	length-diameter ratio	LO	Lunar Orbiter
KAUAIH	Kokee Park, Kauai, Hawaii, NASA STADAN Station	LD	low density	LOC	Launch Operations Center (AFETR)
K-band	frequency band between 10.9 and 36.0 GHz	L:D	lift-drag ratio	LOD	Launch Operations Director (NASA)
KE	kinetic energy	LDD	lunar dust detector	LOFAR	low frequency acquisition and ranging
KPNO	Kitt Peak National Observatory (Tucson, Ariz)	LDR	light-to-dark ratio	LOFAR	low frequency analysis and recording
		LDR	low-density recorder	LOH	light observation helicopters
		LDTM	lander dynamic test model	LOI	lunar orbit insertion
		LE	lunar ephemeris	long	longitude
		LED	light-emitting diode	LOR	lunar orbit rendezvous
		LEAP	Lifetime Element Advancing Program	Loran	long range navigation system
		LEB	lower equipment bay	LOS	loss of signal
				LOV	loss of view
				LOX	liquid oxygen

KPSM	klystron power supply modulator	LEID	low energy ion detector	LP	linear phase
KSC	Kennedy Space Center, Cape Kennedy, Florida	LEIS	Lander Electrical Interface Simulator	LP	linear polarization
KSC/ULO	Kennedy Space Center/Unmanned Launch Operations	LEM	Lunar Excursion Module	LP	linear programming
KSC-WTROD	KSC Western Test Range Operations Division (NASA, Lompoc, Calif.)	LEO	Lunar Exploration Office (NASA)	LP	liquid propellant
KSR	teletype keyboard send-receive unit	LEOT	left-end-of-tape	LP	low pressure
KWIC	keyword-in-context	LEPEDEA	low-energy proton and electron differential analyzer	LP	low pass
KWOC	keyword-out-of-context	LeRC	Lewis Research Center (Cleveland, Ohio)	LPA	Launch Phase Analyst
L	time of launch	LES	Launch Escape System	LPCA	Lunar Pyrotechnic Control Assembly
LADAR	laser doppler radar	LESS	Lunar Escape System	LPE	Lunar and Planetary Ephemerides Assembly (SFOF)
LADT	low-altitude drop test (VOS)	LF	low frequency (30 to 300 kHz)	LPHS	lunar and planetary horizon scanner
LAMC	last maneuver calculation (orbit identification)	L/F	line feed (TTY symbol)	LPIA	Liquid Propellant Information Agency (John Hopkins University)
LAN	longitude of the ascending node	LFC	lunar facsimile capsule	L&PP	Lunar and Planetary Programs
LAPM	Last Pre-Midcourse Orbit	LFOS	Launch and Flight Operations System	LR	long range
LARTS	Los Angeles Regional Transportation System	LGA	low-gain antenna	LRC	Langley Research Center (Hampton, Virginia)
LAS	large astronomical satellite	LGE	lunar geology experiment	LRES	long-range earth sensor
LASA	large area solar array	LH	left hand	LRL	Lawrence Radiation Laboratory (AEC)
LASER	light amplification by stimulated emission of radiation	LH	left-handed	LRL	Lunar Receiving Laboratory (NASA)
LASL	Los Alamos Scientific Laboratory	LH	local horizontal	LRRR	laser ranging retro-reflector
LASP	Laboratory for Atmospheric and Space Physics (Boulder, Colorado)	LHA	local hour angle	LRS	lander radio subsystem
LAT	Local Apparent Time	LIBACC	Library Acquisition Program (Computer Program)	LRV	Lunar Roving Vehicle
lat	latitude	LIBMRG	Library Merge Program (Computer Program)	LS	low speed
		LIBSET	Library Set (Computer Program)	LSI	large-scale integrated (circuit)
				LSM	lunar surface magnetometer
				LSP	lunar survey probes
				LSSM	local scientific survey module

LSSM	Lunar Surface Scientific Modules	MCC-H	Mission Control Center, Houston	MESS	Magnetic Emulsion Spectrometer System
LSTM	lander static test model	MCC-K	Mission Control Center, Cape Kennedy	MESS	mechanical electronic subassembly simulator (UV photometer replacement on Mariner)
LTM	life test model	MCD	megawatt cassegrain diplexer	MEW	microwave early warning
LTRS	Letters (Teletype Lower Case)	MCD	monitor criteria data	MF	machine finish
LTS	laboratory test set	MCDG	Monitor Criteria Data Set Generation Processor Assembly (SFOF)	MF	medium frequency (300 to 3000 kHz)
LTV	Life Test Vehicle	MCE	media conversion equipment	MF	metallic film
LUB	least upper bound	MCF	Multiple Cassegrain Feed (DSIF)	MFCO	manual fuel cutoff
LV	launch vehicle	MCG	memory character generator	MFP	master file program
L/V	launch vehicle (alternate for LV, used by JPL convention)	MCIM	Midcourse Maneuver (computer program)	MFP	mean free path
LVDT	linear-variable differential transformer	MCM	Megawatt Cassegrain Monopulse	MFSK	multiple-frequency shift keying
LVMP	launch vehicle mission peculiar	MCR	Mission Control Room (SFOF)	MG	motor generator
LVPP	Launch Vehicle & Propulsion Program (NASA)	MCS	Monitor and Control System (DSIF)	MGA	medium-gain antenna
LWP	Langley Working Paper (NASA)	MCSS	Monitor and Control Subsystem (DSIF)	MGC	manual gain control
M	time of maneuver	MCUIS	Master Control and User Interface Software Subsystem (SFOF)	MHD	magnetohydrodynamics
MAC	maneuver analysis and command	MCVG	memory character vector generator	MI	mission independent
MAC	mean aerodynamic center	MCW	modulated continuous wave	MIA	mission-independent area (DSIF)
MACG	Maneuver Analysis and Command Group	MD	metals disintegrating	MIC	memory interface connection
MAD	Madrid, Spain, NASA MSFN Station	MD	mission dependent	MICCS	Minuteman Integrated Command and Control System
MA&D	mission analysis and design	M-D	modulation-demodulation	MICS	Management Information and Control System
MADAM	Moderately Advanced Data Management	MDA	motor drive amplifier	MIDAS	Missile Defense Alarm System
		MDA	multiple docking adapter	MIE	mission-independent equipment

MADGAR	Tananarive, Malagasy Republic, NASA STADAN Station (STADAN designation)	MDB	Mission Display Board Assembly (SFOF)	MIL	Merritt Island, Florida, NASA MSFN Station
MADX	Madrid, Spain, NASA MSFN Station (at DSS 61)	MDC	mild detonating cord	MILA	Merritt Island Launch Area
MA&E	Mission Analysis and Engineering	MDCX	Monitor Criteria Data Program	MILS	Missile Impact Location System
magamp	magnetic amplifier	MDE	mission-dependent equipment	MIPS	Miniature Implantable Power System
MAMS	Multiple Access to Memory System	MDI	mission-dependent interface	MIR	memory-information register
MAR	Mission Analysis Representative	MDL	master data library	MIS	Management Information System
MARS	Multiple Artillery Rocket System	MDL	minimum detection limit	MIS	metal insulator semiconductors
MAS	Memory and Auxiliary Storage Subsystem (SFOF)	MDPR	Madrid predict (orbit identification)	Mistram	Missile Trajectory Measurement
mascon	mass concentration	MDR	Master Data Record	MIT	Massachusetts Institute of Technology
MASER	Microwave Amplification by Stimulated Emission of Radiation	MDROC	mission design requirements, objectives and constraints	MIT	Merritt Island Station
MAT	Molecular Analysis Team	MDS	Modulate-Demodulate Subsystem	MITOC	Missile Technical Operations Communications System (AFETR)
MATS	mission analysis and telemetry simulation	MDSCC	Madrid Deep Space Communications Complex	MITR	MIT Research Reactor
MAWD	Mars atmospheric water detection (VOS)	MDT	mean downtime	MLA	Merritt Island, Florida, USAF ETR Station 19
MC	memorandum of conditions	MDT	Mountain Daylight Time	MLE	Maximum likelihood estimator
MC	midcourse	ME	master equatorial	MLSP	Multiple-Link Satellite Program
MC	Mission Control	MECO	Main Engine Cutoff (Centaur)	MM	Maintenance Monitor
M/C	Midcourse	MED	manual entry device	MM	Mariner Mars Project
MCC	Media Conversion Center (SFOF)	MEDUSA	Multiple-Element Directional Universally Steerable Antenna	MMC	Martin Marietta Corporation
MCC	Mission Control Center (SFOF)	MEI	main engine ignition	MMCD	Master Monitor Criteria Data File
MCCA	Media Conversion Computer Assembly (SFOF)	MEIG	main engine ignition	MMDC	Mount Misalignment Data Collection Routine
		MEIGN	main engine ignition	MMH	Monomethylhydrazine (rocket propellant)
		MES	Main Engine Start		

MMSA	Multiple-Mission Support Area (SFOF)	MPD	Maintenance Policy Document (DSIF)	MTD	master tracking data
MMSE	minimum mean square error	MPE	mission-peculiar equipment	MTDF	Master Tracking Data File
MMSE	multiple-mission support equipment	MPF	Multiple Primary Feed (DSIF)	MTF	megawatt transmitter filter
MMSR	multiple-mission support recording	MPFS	Multiple Primary Feed System	MTF	Microwave Test Facility
MMT	multiple-mission telemetry	MPI	mean point of impact	MTF	Mississippi Test Facility (NASA)
MMTS	Multiple Mission Telemetry System	MPLS	maximal principle least squares	MTF	modulation transfer function
MO	Mission Operations (NASA)	MPMS	multiple-pressure measuring system	MTGS	Midcourse and Terminal Guidance System
MO	mission oriented	MPS	main power switch	MTM	mechanical test model
M&O	maintenance and operations	MR	memory register	MTR	Materials Testing Reactor (Argonne National Laboratories)
MOA	Memorandum of Agreement	MRB	Material Review Board	MTS	missile test stand
MOC	Master Operational Console	MRB	Mission Review Board	MTS	mobile tracking station
MOC	Memorandum of Conditions	MRF	megawatt receiver filter	MTTF	mean time to failure
MOC	Mission Operations Center (Building AO, Cape Kennedy, Florida)	MRH	mission-related hardware	MTVS	Mission Test and Video System (SCF)
M&OC	Monitor and Operations Control System (SFOF)	MRS	mission-related software	MU	Sequential Planetary Ranging System (DSIF)
MOCSW	Monitor and Operations Control Software Subsystem (SFOF)	MRSD	mission requirements on system design	MUF	maximum usable frequency
MODEM	modulator-demodulator	MS	margin of safety	MUI	mass unbalance input
MODET	mortar detection	MS	millisecond clock	MUS	mass unbalance spin
mods	modifications	MSA	Mission Support Area	MUSA	Multiple-Unit Steerable Antenna
MOE	mission-oriented equipment	MSB	Mission Status Board (SFOF)	MUSTARD	Multiunit Space Transport and Recovery Device
MOI	Mars orbit insertion	MSB	most significant bit	mux	multiplex
		MSC	Manned Spacecraft Center (Houston, Texas)	muxmod	multiplex modulation
		MSCC	Manned Space Control Center	MV	Mariner Venus Project

MOI	moment of inertia	MSD	Materials and Structures Division (NASA)	MV	multivibrator
MOIS	Mission Operations Intercommunication System	MSD	most-significant digit	MVC	Master Vellum Center (JPL)
MOJAVE	Goldstone, California, NASA STADAN Station	MSE	Maintenance Support Equipment (DSIF)	MVM	Mariner Venus-Mercury Project
MOL	Manned Orbiting Laboratory	MS/EMI	mission sequence/electromagnetic interference	MVS	Mission Video System
Molsink	Molecular Sink Laboratory	MSFC	Marshall Space Flight Center (Huntsville, Alabama)	MWS	megawatt waveguide switch
MON	Monitor System (DSN)	MSFN	Manned Space Flight Network (now incorporated into the Goddard Network)	mx	multiplex
MONA	Monitor Assembly (GCF)	MSFSRD	Manned Space Flight Support Requirements Documentation	MXK	Multiple-Frequency X- and K-Band (feed cone)
MOP	matrix operations programming	MSI	medium scale integrated circuit	N	north (latitude)
MOP	Mission Operations Plan	MSL	mean sea level	NA	narrow angle
MOPCOM	matrix operations programming combination of estimates	MSO	Management Systems Office (NASA)	NA	not applicable
MOPS	Maneuver Operations Program System	MSP	Maintenance Support Program (DSIF)	NA	not available
MOPS	Missile Operations Paging System	MSR	mission support recording (DSIF)	NAA	narrow-angle acquisition
MORL	Manned Orbital Research Laboratory	MSRR	Mission and System Requirements Review	NAA	Network Analysis Area (SFOF)
MOS	metal oxide semiconductor	MSSVCG	minimum steady-state variance	NACA	National Advisory Committee on Aeronautics
MOS	Mission Operations System	MST	Mountain Standard Time	NAMG	narrow-angle Mars gate
MOSFET	metal oxide semiconductor field effect transistor	MT	master timer (CC&S command)	NAP	nuclear auxiliary power
MOU	Memorandum of Understanding	MTBF	mean time between failures	NAPO	NASA Pasadena Office
MP	manpower	MTC	Mission and Test Computer (1230/1219)	NAPU	nuclear auxiliary power unit
MP	mid-phase			NAR	noise-adding radiometer
MPAD	Mission Planning and Analysis Division			NAR	North American Rockwell Corp.
MPD	magnetoplasdynamic			NASA	National Aeronautics and Space Administration
				NASAP	Network Analysis for Systems Application Program
				NASC	National Aeronautics and Space Council

NASCOM	NASA Communications Network (world-wide)	NOAA	National Oceanic and Atmospheric Administration (Dept. of Commerce)	NTIS	National Technical Information Service
NASCOP	NASA Communications Operating Procedure	NOCC	Network Operations Control Center (MSFN)	NTL	Nuclear Thermionics Lab
NAS-NRC	National Academy of Sciences-National Research Council	NOD	Network Operations Directive (MSFN)	NTO	nitrogen tetroxide (N ₂ O ₄)
NAT	Network Analysis Team	NOM	Network Operations Manager (MSFN)	NTP	normal temperature and pressure
NASTRAN	NASA Structural Analysis (Computer Program)	NOP	Network Operations Procedure (MSFN)	NTR	new technology report
NATO	North Atlantic Treaty Organization	NOPA	Network Operations Performance Analysis	NTS	NASA Test Support
NB	narrow band	NOR	Not Operationally Ready	NTSC	Centaur Missions Office, NASA Test Support
N/B	noise power/bandwidth	NPC	NASA Publication Control	NTSO	NASA Test Support Office
NBS	National Bureau of Standards	NPD	NASA Policy Directive	NTTF	Network Test and Training Facility (GSFC)
NBS-A	Atomic Time as kept by NBS	NPD	Nuclear Power Demonstration (reactor, Des Joachines, Canada)	NUDETS	Nuclear Detection and Reporting System
NBS (UTC)	Universal Time Code as kept by NBS	NPL	National Physical Laboratory (British agency similar to Bureau of Standards)	OA	Office of Administration (NASA)
NBVCXO	narrow-band voltage-controlled crystal oscillator	NPS	north polar sequence	OA	Operations Advisor (JPL/ETR)
NCAR	National Center for Atmospheric Research (Boulder, Colo.)	NRAO	National Radio Astronomy Observatory (Greenbank, W. Va.)	OA	Operations Area
NCG	Network Control Group (MSFN)	NRC	National Research Council of the National Academy of Sciences	OAA	optical acquisition aid (DSIF)
NCI	National Cancer Institute	NRC	Network Reliability Coordinator	OAE	optical alignment equipment
NCO	number-controlled oscillator	NRD	National Range Division (USAF)	OAMS	orbital attitude maneuvering system
NCP	Net Control Procedure			OAo	Orbiting Astronomical Observatory
NCV	normalized critical view			OAR	Operations Analysis Report
NDL	Numerical Drawing List			OART	Office of Advanced Research and Technology (NASA)
NDRO	nondestructive readout			OAS	Office for Advanced Studies

NEMO	Naval Experimental Manned Observatory	NRDS	Nuclear Rocket Development Station (AEC test site, Jackass Flats, Nev.)	OASR	Office of Aeronautical and Space Research (NASA)
NEP	near-Earth phase	NRL	Naval Research Laboratory	OAT	operating ambient temperature
NEP	negative equally probable	NROO	Naval Reactors Operations Office (AEC, Schenectady, N.Y.)	OATA	Optical Acquisition and Tracking Aid Assembly
NEP	noise equivalent power	NRT	near-real time	OATM	orbiter antenna test model (VOS)
NEPA	National Environmental Policy Act	NRT	nonreal time	OC	Operations Chief (DSN)
NEPN	Near-Earth Phase Network	NRTC	Nonreal-Time Conversion Subsystem (SFOF)	OCC	Operations Control Center
NEROC	North East Radio Observatory Corp.	NRTS	Nuclear Reactor Testing Station (AEC, Idaho Falls, Idaho)	OCR	optimum charge regulator
NERV	Nuclear Emulsion Recovery Vehicle	NRZ	nonreturn to zero	OCR	optical character recognition
NETCOM	Network Control Communications (DSIF)	NRZ-C	nonreturn to zero change	OCT	Operations Control Team (DSN)
NETCON	Net Control (call sign)	NRZ-M	nonreturn to zero mark	OCV	open circuit voltage
NETDS	Near-Earth Tracking and Data System	NCSA	NASCOM Assembly (GCF)	OD	Operations Directive (UDS)
NEWFLD	St. John's, Newfoundland, NASA STADAN Station	NSE	natural space environment	OD	orbit determination
NFM	noise-figure meter	NSF	National Science Foundation	OD	outside diameter
NHB	NASA Handbook	NSIA	National Security Industrial Association	ODC	Operational Data Center/DSN
NIB	Noninterference Basis	NSO	Network Support Office	ODC	Operational Document Control
NIH	National Institute of Health	NSP	NASA Support Plan	ODC	oscilloscope digital control
NIM	Non-Interrupt Mode	NSRDS	National Standard Reference Data System (NBS)	ODDP	octyl diphenyl phosphate
NITR	National Institute for Telecommunications Research (South Africa)	NSS	Nodding Subdish System	ODE	Orbit Data Editor Assembly (SFOF)
NLD	NASA Launch Director	NSSC	Naval Ship Systems Command	ODG	orbit data generator program (SFOF IBM 7094)
NLM	National Library of Medicine	NSSDS	National Space Science Data Center (NASA, Goddard)	ODP	Orbit Determination Program
NMI	NASA Management Instruction	NST	Network Support Team	ODR	Original Data Record
NMM	NASA Management Manual			ODS	orbiter dynamic simulator (VOS)
NMR	nuclear magnetic resonance			ODT	Operational Demonstration Test
NNSG	NASCOM Network Scheduling Group			ODTM	orbiter dynamic test model (VOS)
NO	Naval Observatory			OEIS	orbiter electrical interface simulator (VOS)

OEPS	Office of Educational Programs and Services (NASA)	OPSCOP	Operations Control (Monitor) Program	OVRS	Operational Voice Recording Subsystem
O/F	oxidant/fuel-weight flow ratio	OPS-X	operational teletype message (non-data)	OVT	Operational Verification Test
OFHC	oxygen-free high conductivity			P	pulse
OGC	Office of General Counsel (NASA)	OR	Operations Requirements (UDS)	PA	power amplifier
OGO	Orbiting Geophysical Observatory	ORACT	Operational Readiness and Confidence Test	PA	Program Authority
OHM	Office of Hazardous Materials (Dept. of Transportation)			PA	public address (audio system)
		ORBIS	Orbiting Radio Beacon Ionospheric Satellite	PA	pulse amplifier
OI	orbit insertion			PAD	Project Approval Document
OIA	Office of International Affairs (NASA)	ORDEAL	Orbit Rate Display-Earth and Lunar	PADA	Public Address Assembly (GCF)
		ORDET	orbit determination group	PAF	payload attachment fitting
OIA & TU	Office of Industry Affairs and Technology Utilization (NASA)	ORDIR	omnirange digital radar	PAFB	Patrick Air Force Base
		ORNL	Oak Ridge National Laboratory (AEC, Tenn.)	PAG	Parts Acquisition Group
OIC	Officer in Charge			PAM	pulse-amplitude modulation
OIM	orbit insertion maneuver	ORS	orbiter relay simulator (VOS)	PAO	Public Affairs Office
OJT	on-the-job training	ORT	Operational Readiness Test	PAP	Physics & Astronomy Programs (NASA)
OLA	Office of Legislative Affairs	ORTEC	Oak Ridge Technical Enterprises Corp.	paramp	parametric amplifier
OLF	orbital launch facility			PAS	perigee - apogee satellites
OLO	orbital launch operations	OS	operating system	PAS	Public Address Subsystem
OLP	optical line pair	OSDP	on-site data processing	PAS	pyrotechnics arming switch
OLV	orbital launch vehicle	OSE	operational support equipment	PA/SP	positioner antenna and solar panel
OLR	open-loop receiver (DSIF)	SEDS	Operational Support Equipment Design Specification	PASS	Private Alarm Signalling System
OM	Operations Manager	OSFD	Office of Space Flight Development (NASA)	PAT	Patrick Air Force Base, Cocoa Beach, Florida, USAF ETR Station O
OMAS	Operational Miscellaneous Audio Subsystem				
		OSFM	Office of Spacecraft and Flight Missions (NASA)	PATE	programmed automatic telemetry (tape) evaluator
OMB	Office of Management & Budget				

OMD	Office of Management Development (NASA)	OSIS	Office of Scientific Information Service (National Science Foundation)	PB	pentaborane (rocket fuel)
OMR	Operations Manager's Report			PBAA	polybutadiene acrylic acid
OMSF	Office of Manned Space Flight (NASA)	OSM	omni spectra miniature	P-band	frequency band between 225 and 390 MHz
ONERA	Office National d'Etudes et de Recherches Aeronautiques	OSO	Orbiting Solar Observatory	PBNA	phenyl beta naphthylamine
ONR	Office of Naval Research	OSRD	Office of Scientific Research & Development	PC	pericynthion (perilune or low point in lunar orbit)
OOL	out of lock	OSRS	Operational Status Recording Subsystem	PC	program control
OOM	Office of Organization and Management (NASA)	OSS	Office of Space Sciences (NASA)	P-C	polar to Cartesian
OP	Office of Policy (NASA)	OSSA	Office of Space Science Applications (NASA)	PCA	Power Conditioning Assembly
OPA	Office of Public Affairs (NASA)	OST	Office of Science & Technology	PCA	Pyrotechnics Control Assembly
OPAS	Operational Public Address System	OT	overtime	PC&A	Project Control and Administration
OPE	Operational Planning Estimate	OTA	optical tracking aid (DSIF)	PCB	printed circuit board
OPE	optical pointing error	OTC	Overseas Telecommunications Corporation	PCD	prelaunch analysis of probability
OPE	outer planetary explorer			PCE	power conditioning equipment
OPGT	Outer Planets Grand Tour	OTCM	orbiter thermal control model (VOS)	PCM	pulse-code modulation
OPI	Office of Public Information (NASA)	OTCS	Operational Teletype Communications Subsystem	PCP	prototype communications processor
OPM	Outer Planet Mission			PCQ	Professional Capabilities Questionnaire (JPL)
OPP	Outer Planet Project	OTDA	Office of Tracking and Data Acquisition (NASA)	PCS	Personnel Capabilities System (JPL)
OPPE	Operations Planning Project Engineer (DSIF)	OTES	orbiter thermal effects simulator (VOS)	PCT	Periodic Confidence Test
OPR	Office of Primary Responsibility (JPL)			PCTFE	polychlorotri fluoro-ethylene
OPS	Operations Control System (DSN)	OTS	operational time sync	PCU	power control unit
ops	operations	OUA	Office of University Affairs (NASA)	PCUC	Positive Continuous Ullage Control
OPSCON	DSN Operations Control Chief	OVCS	Operational Voice Communications System (SFOF)	PD	planning document
				PD	potential difference
				PD	procurement drawing

PD	project document	PIV	planet in view	PPM	pulse-position modulation
PDC	Permission Documentation Change	PIV	propellant isolation valve	PPO	polyphenylene oxide
PDF	probability density function	pixel	picture element	PPO	polypropylene oxide
PDI	Project Data Index (JPL)	PLAC	post-launch analysis of compliance	PPS	primary propulsion system
PDL	Project Document List	PLANET	Planned Logistics Analysis and Evaluation Technique	PPS	pulses per second
PDM	pulse-duration modulation			PQ	planetary quarantine
PDP	Program Development Plan	PLAS	post-landing attitude determination (computer program mnemonic)	PQA	parts quality assurance
PDP	programmed data processor			PQP	Planetary Quarantine Plan
PDP	programmed digital processor	PLATO	Platform Observables Subassembly (360/75)	PR	Progress Report
PDP	Project Development Plan			PR	pseudo-residual
PDR	preliminary design review	PLF	phone line formatter	PRD	Program Requirements Document (UDS)
PDT	Pacific Daylight Time	P-List	Problem List	PRD	Project Requirements Document
PDT	performance demonstration test	PLL	phase locked loop	Prdx	Prediction Program
PE	potential energy	PLM	pulse-length modulation	PRE	Pretoria, South Africa, USAF ETR Station 13
PE	probable error	PLO	programmed local oscillator		
PE	programmed exciter	PLSS	Portable Life Support System	PREL	preliminary evaluation (orbit identification)
PE	Project Engineer	PM	permanent magnet		
PEGM	Planetary Encounter Geometry and Science Instrument Sequence Program	PM	phase modulation	PRF	pulse-repetition frequency
		PM	preventive maintenance	PROR	predict (orbit identification)
PEL	precision elastic limit	PMA	planetary microbiological assay	pror	predicted orbit
PEP	Planetary Exploration Plan	PMG	Postmaster General (Australia)	PRP	pseudo-random pulse
PER	parity error rate	PMIS	Personnel Management Information System (NASA)	PRPP	Pseudo-Residual Plot Program
PER	Preliminary Engineering Report	PML	Parts Material List	PRR	pulse-repetition rate
PERT	Program Evaluation and Review Technique	PMP	premodulation processor	PRRM	Program Review and Resources Management (NASA)
		PMR	power monitor relay		
PES	photoelectric scanner	PMR	Project Management Report	PSAC	President's Scientific Advisory Committee

PET	probe ephemeris tape	PMT	photomultiplier tube	PSC	Physical Sciences Center
PF	perchloryl fluoride (rocket liquid propellant oxidizer)	PN	part number	PSC	processing and spectral control
PF	power factor	PN	pseudo noise	PSD	phase-sensitive detector
PF	proximity fuse	PN	pseudorandom noise	PSD	power spectral density
PFDA	precision frequency distribution amplifier	PNG	pseudonoise generator	PSD	processing status display (SFOF DPCS)
PFM	pulse-frequency modulation	PNP	Precision Navigation Project	PSE	Passive Seismic Experiment
PFR	Problem/Failure Report	PO	post orbit	Pseudo-Resid	Pseudo-Residual Processor Assembly (SFOF)
PGDS	Pioneer Ground Data System	PO	programmed oscillator		
PHA	pulse-height analysis	P/O	parking orbit	PSK	phase-shift keyed
PHD	pulse-height discrimination	POAA	Planetary Operations Analysis Area	PSL	power source logic
PHDR	preliminary hardware design review	POC	productional operational capability	PS&L	power switching and logic
PHF	pulse-height analyzer	POGASIS	Planetary Observation Geometry and Science Instrument Sequence Program	PSNR	power signal-to-noise ratio
PHP	planetary horizontal platform			PSO	planet sensor output
PHVPS	primary high-voltage power supply	POGO	Polar Orbiting Geophysical Observatory	PSP	Program Support Plan (UDS)
PI	principal investigator			PSR	Pad Safety Report
PI	Program Introduction (UDS)	POP	Program Obligation Plan	PSRD	Program Support Requirements Document
PI	programmed instruction	POST	postmidcourse (orbit Identification)	PSS	Planetary Scan Subsystem
PIC	Project Information Center	POT	Parallel Output	PSS	propulsion subsystem structure
PICS	Procurement Information Control System (NASA)	POWM	powered flight (computer program)	PST	Pacific Standard Time
PIFOV	planet in field of view	PP	Planetary Programs (NASA)	PSTF	Pioneer Station Training Facility
PIN	parallel input	P/P	peak to peak	PT	paper tape
PIN	P-intrinsic-N	PPE	portable purge equipment	PTC	proof test capsule
PIO	Public Information Office	PPF	phase pushing factor	PTM	proof test model (S/C)
PIP	Project Implementation Plan	PPI	plan position indicator	PTM	pulse-time modulation
PIPS	Postinjection Propulsion Subsystem	PPI	Project Procurement Instructions (JPL)	PTO	proof test orbiter (VOS)
		PPL	Preferred Parts List	PT-S/C	proof test spacecraft

PU propellant utilization
 PUCU Propellant Utilization Control Unit
 PV planetary vehicle
 PVT Performance Verification Test
 PVT pressure-volume-temperature
 PWM pulse width modulation
 PWR Power Subsystem (spacecraft)
 PZT photographic zenith tube
 QA quality assurance
 QAI Quality Assurance Instruction
 QA&R quality assurance & reliability
 Q-band frequency band between 36 and 46 GHz
 QC quality control
 QC quantitative command
 QSR Quarterly Summary Report
 QTM qualification test model
 QTR Quarterly Technical Review (JPL formal publication)
 QTU qualification test unit
 R range
 RA radar altimeter
 RA right ascension
 RACC Remote ARIA Control Center (Wheeler AFB, Hawaii)
 RACR Resources Allocation Change Request

RECON Remote Console (NASA On-Line Information Retrieval System; JPL has terminal)
 REIC Radiation Effects Information Center (Batelle Memorial Institute)
 REOT right-end-of-tape
 RER receiver/exciter ranging
 RETMA Radio-Electronics-Television Manufacturers Association
 RF radio frequency
 RFA request for action
 RFI radio frequency interference
 RFNA red fuming nitric acid
 RFP Request for Programming
 RFP Request for Proposal
 RFQ Request for Quotation
 RFS Radio Frequency Subsystem (S/C)
 RFT real Fourier transform
 RFTC radio frequency test console
 RH relative humidity
 RH right hand
 RHI range-height indicator
 RIC Remote Information Center
 RIG radio inertial guidance
 RIM read-in mode

RS reset-set (flip-flop)
 RSC range safety command
 RSC range safety control
 RSE Reference Standards Equipment (DSIF)
 RSL Reference Standards Laboratory (DSIF)
 RSO Range Safety Officer
 RSP rotation in a selected plane
 RSR Resources Status Report
 RSRS Radio Space Research Station
 RSS radio subsystem
 RT real time
 RT room temperature
 R-T receive-transmit
 R-T receiver-transmitter
 RTC real-time command
 RTC real-time computer
 RTCC Real-Time Computer Complex (MCC-H)
 RTCF Real-Time Computing Facility
 RTCS Real-Time Computing System (AFETR)
 RTD resistive temperature device
 RTDT Real-Time Data Translator
 RTF real-time Fortran

RAD	random access disk	RIMD	Resources & Institutional Management Division (NASA)	RTG	radio-isotope thermoelectric generator
R&AD	research and advanced development	RIS	Range Instrumentation Ship	RTI	referred-to-input
RADVS	radar altimeter and doppler velocity sensor	RIS	rotatable initial susceptibility	RTIO	Real-Time Input/Output Interface Subsystem (SFOF)
RAES	Radio Astronomy Experiment Selection Panel	RL	resistance-inductance	RTLT	round-trip light time
RAM	Radio Attenuation Measurement Project	RLC	receive logic chassis	RTM	Radiation Test Model
RAP	Residual Analysis Program (SFOF)	RLP	rotating linear polarization	RTMSW	Real-Time DSN Monitor Software Assembly (SFOF)
RAS	Relay Antenna Subsystem (VOS)	RMS	retromotor simulator	RTO	Referred-to-Output
RAST	Reliability and System Test	RNA	ribonucleic acid	RTOP	Research and Technology Operating Plan (NASA)
RATAC	Radar Target Acquisition (system)	RNG	Ranging System (DSIF)	RTOS	Real-Time Operating System (Houston)
RBE	relative biological effectiveness	RO	receive only (teletype)	RTPM	real-time program management
RC	resistance-capacitance	R/O	readout	RTS	Radio Telemetry Subsystem
RC	resistance-coupled	R&O	Requirements and Objectives	RTS	Relay Telemetry Subsystem (VOS)
RCA	reaction control assembly	RORA	reliable operate radar altimeter	RTSDS	Real-Time Scheduling Display System
RCC	Range Control Center	ROTI	Recording Optical Tracking Instrument	RTTS	Real-Time Telemetry System
RCO	Range Control Officer	RP	rocket propellant	RTTY	radio teletypewriter
RCP	right(-hand) circular polarization	RPA	random phase approximation	RTV	reentry test vehicle
RCS	Reaction Control System	RPA	retarding potential analyzer	RTV	Room-Temperature Vulcanizing compound
RCS	Reentry Control System	RPI	relay position indicator	RTZ	return to zero
RCV	Receiver/Exciter Subsystem (DSIF)	R&PM	Resources and Program Management	RU	range unit
rcvr	receiver	RQAO	Reliability & Quality Assurance Office (NASA)	RV	reentry vehicle
R&D	research and development	RR	rendezvous radar	RV	roving vehicle
RDA	Ranging Demodulator Assembly (DSIF)	RRA	resident research associate		
RE	receiver/exciter	R/RC	Removal/Re-Certification		
REC	Recording Subsystem (DSIF)	RRR	Range and Range-Rate System		
		RRS	Relay Radio Subsystem (VOS)		

RWC	read, write, and compute	SCA	Simulation Conversion Assembly (DSIF)	SDAT	Spacecraft Data Analysis Team
RWC	read(write), continue	SCAL	STAR computer assembly language	SDB	Spacecraft Design Book
RWV	read-write-verify command equipment (DSIF mission-dependent)	SCAM	Station Control and Monitoring	SDC	signal data converter
RZ	return to zero	SCAMA	Signaling, Conferencing and Monitoring Arrangement (NASCOM voice circuit)	SDCC	Simulation Data Conversion Center (SFOF)
S	separation			SDCS	science data conditioning system
S	south (latitude)	SCAN	Scientific Current Aerospace Notices (NASA)	SDCS	simulation data conversion system
S/A	subassembly			SDDS	signal data demodulator set
S&A	safe and arm	SCAS	Southwest Center for Advanced Studies	SDFC	Space Disturbance Forecast Center
SAA	S-Band Acquisition Antenna (DSIF)			SDL	Standard Distribution List (NASA)
SABRE	self-aligned boost and re-entry	SCCG	Station Communications Control Group (GCF)	SDL	Systems Development Laboratory (JPL)
SADL	Sterilization Assembly Development Laboratory	SCD	S-Band Cassegrain Diplexer	SDP	station data processing
SAE	Society of Automotive Engineers	SCDL	saturated current demand logic	SDR	System Data Record
SAF	Spacecraft Assembly Facility (JPL Building 179)	SCF	Scientific Computing Facility (1108)	SDS	Scientific Data Systems (a computer manufacturer)
SAF	symmetry-adapted function	SCF	self-consistent field	SDS	solar disk simulator
SAG	science analysis group	SCF	Spacecraft Checkout Facility (Cape Kennedy)	SDS	Spacecraft Design Specification
SALT	Strategic Arms Limitation Talks			SDSSE	science data system support equipment
SAM	School of Aerospace Medicine	SCF	standard cubic foot		
SAM	special advisory message	SCF-1	Spacecraft Checkout Facility No. 1 (Building AM, Cape Kennedy)	SDT	Science Data Team
SAMIS	Structural Analysis and Matrix Interpretive System (JPL)	SCF-2	Spacecraft Checkout Facility No. 2 (Building AO, Cape Kennedy)	SE	standard error
SAMMIE	Scheduling Analysis Model for Mission-Integrated Experiments			SE	support equipment
		SCG	SEMMS Coordinating Group	SE	sustainer engine
SAMSO	Space and Missile Systems Organization, Los Angeles Air Force Station	SCID	sub-commutator identification (Pioneer)	SE	System Engineer
				SEAN	strapdown, electrically suspended gyro aerospace navigation (system)

SANP	secondary auxiliary nuclear power	SCISM	Science Subsystem Event Simulator Program (Computer Program)	SEB	Source Evaluation Board
SAO	Smithsonian Astrophysical Observatory	SCL	space-charge-limited	SEC	secondary electron conduction
SAR	Safety Analysis Report	SCLC	space-charge-limited current	SECO	sustainer engine cutoff
SAR	symbol acquisition routine	SCM	S-Band Cassegrain Monopulse (feed cone)	SECOM	School Emergency Communication
SARP	schedule and review procedure			Secor	Sequential Correlation (system)
SARV	Satellite Aeromedical Research Vehicle	SCO	subcarrier oscillator	SECTAM	Sterile Environmental Control Technology Applications to Medicine
SAS	small astronomy satellites	SCP	station communications processor	SEG	Sequence of Events Generator Program (SFOF)
SASU	Saturn/Apollo Systems Utilization	SCR	silicon-controlled rectifier		
SAT	site alteration tests	SCR	Software Change Request	SEIL	Science Experiments Integration Laboratories
SATAN	Satellite Tracking Antenna	SCR	spacecraft received time	SEM	scanning electron microscope
SATCOM	Committee on Scientific and Technical Communication, National Academy of Sciences	SCS	small components structural	SEM	steroscan electron microscope
		SCS 71	Spacecraft Compatibility/Monitor Station, Cape Kennedy, Florida	SEMMS	Solar Electric Multiple-Mission Spacecraft
SATCOM	Satellite Communications Network	SCSCLC	single-carrier space-charge-limited current		
SATODP	Satellite Tracking Orbit Determination Program (computer program)	SCT	S-Band Cassegrain Transmit (feed cone)	SEP	solar electric power
S-band	frequency band between 1550 and 5200 MHz	SCTS	SFOF Communications Terminal Subsystem (GCF)	SEP	solar electric propulsion
SC	simulation co-ordinator			SEPST	solar-electric propulsion system test (technology)
SC	spacecraft	SCTV-GDHS	spacecraft television - ground data handling system		
SC	Statement of Capability (UDS)			SER	SNAP Experimental Reactor (AEC)
SC	stored command	SCU	S-Band Cassegrain Ultra (feed cone)	SERT	space electric rocket test
SC	Support Chief	SD	standard deviation	SERT	space electronic rocket test
S/C	spacecraft (alternate for SC, used by JPL convention)	SD	Station Director (DSIF)	SERV	Space Emergency Reentry Vehicle
S/C	subcontractor	SDA	Subcarrier Demodulator Assembly (DSIF)	SESA	Society for Experimental Stress Analysis
		SDA	Systems Data Analysis	SET	solar energy thermionic (conversion system)
				SETL	Science Experiment Test Laboratory

SFC	space flight center	SMP	Standard Maintenance Procedure	SPINAL	Stimulator, Planetary Instrument Alignment
SFO	Space Flight Operations	SMRD	spin motor rotation detector	SPITS	scan platform inertial thermal simulator
SFOC	Space Flight Operations Complex	SMS	Sequenced Milestone System	SPL	sound-pressure level
SFOD	Space Flight Operations Director	SMT	S-Band Megawatt Transmit (feed cone)	SPL	Spare Parts List
SFOF	Space Flight Operations Facility	SM/V	squared-mean to variance	SPLL	standard phase-locked loop
SFOM	Space Flight Operations Memorandum	SN	serial number	SPM	Standard Practices Manual (DSIF obsolete)
SFOP	Space Flight Operations Plan	S/N	sequence number	SPODP	Single-Precision Orbit Determination Program (SFOF)
SF/UIS	space frame and unit integrating system	S:N	signal-to-noise ratio	SPOP	Scan Platform Operations Program (Computer Program)
SG	sun gate	SNAP	Systems for Nuclear Auxiliary Power	SPPD	Space Propulsion & Power Division (NASA)
SGS	Statistics Gathering System (360/75 program at Houston)	SNORE	signal-to-noise ratio estimator	SPPPM	Surveyor Project Policy and Procedure Manual
SHA	sidereal hour angle	SNPO	Space Nuclear Propulsion Office (NASA)	SPR	S-Band Planetary Radar (feed cone)
SHF	super-high frequency (3 to 30 GHz)	SNR	signal-to-noise ratio (alternate for S:N, used by JPL convention)	SPR	solid-propellant rocket
SHTPB	saturated hydroxy-terminated polybutadiene	SNSO	Space Nuclear Systems Office (AEC-NASA, Germantown, Md.)	SPS	space power system
SI	International System of Units	SNT	system noise temperature	SPS	Space Programs Summary (a discontinued JPL report)
SIC	simulated interface calibration	SOAP	Systems Operational Analysis Plan	SPSC	Signal Processing and Spectral Control
SICS	SFOF Internal Communications Subsystem (GCF)	SOE	sequence of events	SPST	single-pole single-throw (switch)
SID	sudden ionospheric disturbance	SOG	Ship's Operations Group	SPU	S-Band Polar Ultra (feed cone)
SIE	Science Information Exchange (Smithsonian Institution)	SOM	Spacecraft Operations Manual	SPUR	space power unit reactor
SIM	Scientific Instruments Module (Apollo)	SOP	standard operating procedure		
SIM	Simulation Assembly (DSIF)	SOPM	Standard Orbital Parameter Message		
		SOPT	Science Operations Planning Team		
		SOS	sum-of-the-squares		
		SOSE	science operations support equipment		

SIM	Simulation System (DSN)	SOSO	Safety & Operating Systems Office (NASA)	SPV	sun probe near limb of Venus angle
SIMCEN	Simulation Center (DSN)			spx	simplex
SINS	Ship's Inertial Navigation System	SOW	Statement of Work	SR/AD	supporting research and advanced development
SIO	Scripps Institute of Oceanography	SP	solar panel		
SIP	Studies in Process (JPL)	SP	solid propellant	SRC	Station Reliability Coordinator
SIPM	Star Identification Program, Mariner (SFOF IBM 7094)	SP	space character (teletype symbol)	SRD	Systems Requirement Document
SIRD	Support Instrumentation Requirements Document	SPAA	Spacecraft Performance Analysis Area	SRD	Software Requirements Document
SIRS	satellite infrared spectrometer	SPAC	Signal Programmer and Conditioner (AFETR)	SRF	S-band receiver filter
SIT	separation-initiated timer	SPAC	Spacecraft Performance Analysis and Command	SRI	Stanford Research Institute
SJM	System Junction Module (DSIF)	SPAC	Space Program Advisory Council	SRM	System for Resources Management (JPL)
S&L	standards and limits	SPACE	spacecraft ephemeris generation program (SFOF IBM 7094)	SRO	S-Band Radar Operational (feed cone)
SLAM	surface-launched air missile			SRO	Supervisor of Range Operations
SLE	Station Liaison Engineer	SPADATS	Space Detection & Tracking System	SRPO	Sciences Resources Planning Office (National Science Foundation)
SLIC	System Line Image Composer	SPAN	Solar Particle Alert Network		
SLS	Surface Laboratory System	SPAN	statistical processing and analysis	SRT	Science Recommendation Team
SLTM	structural lander test model	SPARS	Space Precision Attitude Reference System	SRT	Station Readiness Test
SLV	Saturn Launch Vehicle			SRT	supporting research and technology
SM	service module	SPASUR	Space Surveillance Detection Net	SR&T	supporting research and technology
SM	silver mica	SPC	stored program controller	SRV	system readiness verification
SM	Station Manager (DSIF)	SPD	S-Band Polarization Diversity (feed cone)	SS	steady state
SMA	semimajor axis			SS	subsystem
SMC	Station Control and Monitor Console Subsystem (DSIF)	SPDCU	subsurface probe data and control unit	SS	sun sensor
				SSA	Symbol Synchronizer Assembly (DSIF, SFOF)
SMF	S-Band Multi-Frequency (feed cone)	SPE	static phase error	SSAA	Space Science Analysis Area (SFOF)
SMIT	Simulated Midcourse Interaction Test	SPE	Station Project Engineer	SSAC	space science analysis and command
		SPI	Standard Practice Instructions (JPL)	SSB	Science Steering Board

SSB single sideband
SSB Source Selection Board
SSBM single-sideband modulator
SSBSC single-sideband suppressed carrier
SSC spacecraft system console
SSCU soil sampler control unit
SSD software system design
SSD split-screen display
SSDM System Suppressed Data
(computer program)
SSDPS Solar System Data Processing System
(Computer program)
SSF Space Simulator Facility
SSG Science Steering Group
SSMF symbol sink-matched filter
SSO Space Station Office (NASA Langley
Research Center)
SSPDA Surface Sampler Processing and
Distribution Assembly
SSPE Support System Project Engineer
SST subsystem test
SSTF Space Shuttle Task Force (NASA)
SSTF Space Station Task Force (NASA)
SSV satellite servicing vehicle
ST system test
S/T straight time
STA S-band test antenna

STF Spacecraft Test Facility
STF space track facility
STG Space Task Group (NASA)
STIO Scientific & Technical Information
Office (NASA)
STM Section Technical Manual (JPL)
STM Structural Test Model
STOL Short Takeoff & Landing
STOM System Test and Operations Manual
STOR System Test and Operations Report
STP standard temperature and pressure
STP Standard Test Procedure
STP System Test Procedure
STS Spacecraft Telecommunications
System
STS system test set
STV solar thermal vacuum
STVD spacecraft TV video data
SVIC Shock and Vibration Information
Center
SW short wave
SW software
Sw switch
SWG standard wire gage
SWR standing wave ratio (voltage)
SWRI Southwest Research Institute,
San Antonio, Texas

TASC Transportation Association of
Southern California
TAT Technology Application Team
(NASA)
TAT type-approval test
TATRC Type Approval Test Review
Committee
TATS Test and Training Satellite
TAU planetary ranging method (DSIF)
TBA to be announced
TBD to be determined
TBE time base error
TBL turbulent boundary layer
TBS to be supplied
TC temperature control
TC Test Chief
TC Test Conductor
TC thermocouple
TCA Thrust Chamber Assembly
TCA time of closest approach
TCC temperature control circuit
TCD Telemetry and Command Data
Handling Subsystem (DSIF)
TCD Terminal Countdown Demonstration
(Test)
TCFM Temperature Control Flux Monitor
TCG Time Code Generator

STA	Space Technology Applications	SWS	solar wind spectrometer	TCM	temperature control model
STADAN	Space Tracking and Data Acquisition Network (now incorporated into the Goddard Network)	SWT	supersonic wind tunnel	TCM	thermal control model
STAF	Science Team Analysis Facility	SXA	S/X-band antenna (VOS)	TCM	trajectory correction maneuver (similar to midcourse maneuver)
STA ID	Station Identification	SYN	synthesizer	TC&M	telemetry control and monitoring
STAIR	Structural Analysis Interpretive Routine (Program)	sync	synchronization	TCO	Telemetry and Command Subsystem (DSIF)
STAR	Scientific and Technical Aerospace Reports	sync	synchronizer		
STAR	Self Testing and Repairing (JPL S/C computer)	sync	synchronous	TCP	Telemetry and Command Processor Assembly (DSIF)
START	Spacecraft Technology and Advanced Reentry Test	SYNCOM	Synchronous Communications Satellite	TCP	tri cresyl phosphate
STC	Satellite Test Center	synfrq	synthesizer frequency	TCR	temperature control reference
STC	station test and calibration	SYSAD	Systems Adviser	TCSCLC	two-carrier space-charge-limited current
STC	stored time command	SYSCOM	system communications	TCSS	Tri-Cone Support Structure
STC	Systems Test Complex	T	time (interruptible) referenced to an event	TCT	time code translator
STC	system test configuration	TA	true anomaly	TD	technical division
STC	system transfer constant	TA	type approval	TD	Test Director
STCDHS	Spacecraft Telemetry Command Data Handling System	TAER	time, azimuth, elevation and range	TD	tolerance detector
STCDS	System Test Complex Data System	TAG	Telemetry System Analysis Group	TD	transient detector
STCE	System Test Complex Equipment	TAM	type-approval model	T-D	Transmitter-Distributor (teletype)
STE	Station Test Equipment (DSIF)	TAN	Tananarive, Malagasy Republic, NASA STADAN Station (MSFN designation)	TDA	target docking adapter
STEA	System Test Equipment Assembly	TAO	Technology Applications Office (NASA)	TDA	Tracking Data Analysis (a computer program)
STEA	system test, evaluation and assembly	TAO	Transportation Applications Office (JPL)	TDA	Tracking and Data Acquisition
STET	System Test Experiments Tape	TAP	Tracking Alarms Processor (SFOF)	TDA/AE	tracking and data acquisition advanced engineering
STF	s-band transmit filter	TAPE	totally automated programming equipment	TDD	Test Definition Document
				TDE	two-dimensional equilibrium

TDH	Tracking Data Handling Subsystem (DSIF)	TJIM	trajectory computer program	TRK	Tracking Data System (SFOF)
TDLR	thermal descent landing radar	TLC	thin layer chromatography	TRK	Tracking System (DSN)
TDM	Technical Direction Memorandum (JPL Form 2084-S)	TLE	transearth injection	TRKI-12	Telemetry Receive/Record Subsystem (AFETR)
TDM	Technical Division Manager	TLI	Trans-Lunar Injection	TRS	tape recorder subsystem
TDM	time division multiplex	TLM	Telemetry Data System (SFOF)	TRS	Traceability and Reporting System
TDO	Technical Divisions Office (JPL)	TLM	Telemetry System (DSN, DSIF)	TRSW	Tracking Data Software Subsystem (SFOF)
TDP	Tracking Data Processor (MSFN equipment at DSIF)	tIm	telemetry	TS	tensile strength
TDR	tracking and data relay	TLMB	telemetry data buffer	TS	transient source
TDRSS	Tracking and Data Relay Satellite System	TLMSW	Telemetry Data Software Subsystem (SFOF)	TSAC	Tracking System Analytical Calibration
TDS	Tracking and Data System	TLU	time of last update	TSAG	Tracking System Analysis Group
TDSCC	Tidbinbilla Deep Space Communications Complex	TM	Technical Manager	TSC	terminal sterilization chamber
TDI	Test Direction Team	TM	Technical Manual	TSC	thermally stimulated current
TE	trajectory engineer	TM	Technical Memorandum	TSC	thermal sterilization chamber
TE	transverse electric (mode or wave)	TM	telemetry	TSE	test support equipment
TEL-4	AFETR Merritt Island Telemetry Station	TM	transverse magnetic (mode or wave)	TSF	Terminal Sterilization Facility
TELB	telemetry (teletype) data buffer (7044)	TM	true mean	TSF	track synthesis frequency
TEM	thermoelectric module	TMCC	time-multiplexed communications channel	TSG	Timing Systems Group
TEM	transverse electromagnetic (mode or wave)	TMG	transmogrification	TSI	Test Support Instruction
		TMRAO	Table Mountain Radio Astronomy Observatory	TSO	Terminator Sensor Output
		TOM	Tracking Operation Memorandum (obsolete)	TSP	Technical Support Packages (JPL)
		TOOMBA	Cooley Creek, Australia, NASA STADAN Station	TSP	telemetry simulation program
				TSP	Test Support Position
				TSS	Teletype Switching System

TER	Test Evaluation Report	TOP	Test and Operations Plan	TSSDT	Thrust Subsystem Design Team
TEST	Thesaurus of Engineering and Scientific Terms	TOPS	Thermoelectric Outer Planet Spacecraft	TST	Telemetry Simulation Terminal
TETM	thermal effects tests model	TOS	Technical Operational Support	TTL	transistor-transistor logic
TEX	Corpus Christi, Texas, NASA MSFN Station	TP	Test Procedure (DSIF)	TTM	temperature test model
TFL	time from launch (post)	TPBK	tape block	TTM	thermal test model
TFR	Traveler/Failure Report (DSIF)	TPC	tangential period correction	TTS	Teletypewriter System (GCF)
TFR	tunable frequency range	TPDB	tape deblock	TTS	Test and Training Satellite
TFSS	Technical Facilities Subsystem (SFOF)	TPG	teletype preamble generator	TTTA	Teletypewriter Terminal Assembly (GCF)
TFT	thin-film transistor	TPOLY	Timing Polynomial Computer Program	TTY	teletypewriter
TGA	thermogravimetric analysis	TPR	Test Phase Report	TTYA	Teletypewriter Assembly (GCF)
TGD	Technical Guidance Directions	TPS	telemetry processing station	TUO	Technology Utilization Office (NASA)
TGL	Task Group Leader	TPS	Telemetry Processing System (SFOF)	TV	television
TICA	Tactical Intercom Assembly (GCF)	TPSB	Telemetry Processing System Buffer	TVCA	Thrust Vector Control Assembly
TID	traveling ionospheric disturbances	TR	Technical Report	TVCS	Television Communications Subsystem
TIDD	Technical Information and Documentation Division	T-R	transformer-rectifier	TVGDHS	Television Ground Data Handling System
TIG	time of ignition	T-R	Transmit-Receive	TVI	television interference
TIG	tungsten inert gas	TRACE	tracking and communications (extra terrestrial)	TVID	television frame identification data
TIM	Tracking Information Memorandum	TRADAC	trajectory determination and acquisition computation	TVS	Television Subsystem (S/C)
TIM	Tracking Instruction Manual	TRAG	Tracking System Analysis Group	TVSA	Television Assembly (GCF)
TIROS	Television Infrared Observation Satellite	TRAP	test and repair processor	TWM	traveling-wave maser
TIS	Telemetry Input System; Technical Information System	TRD	Trapped Radiation Detector	TWT	traveling-wave tube
TIU	Time Isolation Unit	TRF	tuned radio frequency	TWTA	traveling-wave tube amplifier
				TWU	Technical Writing Unit
				TWX	teletypewriter message
				TXR	Transmitter Subsystem (DSIF)

UAMS	Upper Atmosphere Mars Spectrometer	V-band	frequency band between 46.0 and 56.0 GHz	VTVM	vacuum-tube voltmeter
UC	usable control	VCM	volatile condensable materials	W	west (longitude)
UDL	update link	VCO	voltage-controlled oscillator	W	wideband data (2400 bps to 500 kHz)
UDOP	ultrahigh-frequency doppler system	VCS	Viking change status	WA	workmanship assurance
UDS	Universal Documentation System	VCS	Voice System (GCF)	WAD	Work Authorization Document
UDT	user display terminal	VCXO	voltage-controlled crystal oscillator	WANL	Westinghouse Astronuclear Laboratory
UDTC	user-dependent-type code	VDA	Valve Drive Amplifier	WAR	Work Acquisition Routine
UF-F	universal flip-flop	VDR	Validated Data Record	WB	wideband
UHF	ultra-high frequency (300 to 3000 MHz)	VECO	vernier engine cutoff	W-band	frequency band between 56.0 and 100.0 GHz
UHTPB	unsaturated hydroxy-terminated polybutadiene	VEV	vernier engine vibration	WBCL	wideband communications line
UI	user interface	VF	video frequency	WBCS	Wide-Band Communications Subsystem
UIS	universal isolation switch	VFO	variable-frequency oscillator	WBDA	Wideband Data Assembly (GCF)
U/L	uplink	VFO	Viking Flight Operations	WBDL	wide-band data line
ULO	Unmanned Launch Operations (Kennedy Space Center)	VFSW	variable-frequency sine wave	WBFM	wideband frequency modulation
UMTA	Urban Mass Transportation Administration (Dept of Transportation)	VFTG	voice frequency telegraph gear	WBS	Wideband System (GCF)
UNIPAC	universal payload accommodation capsule	VHF	very high frequency (30 to 300 MHz)	WBS	Work Breakdown Structure (JPL)
UOC	ultimate operational capability	VIB	Vertical Integration Building	WBVCXO	wideband voltage-controlled crystal oscillator
UPS	Uninterruptible Power Supply (SFOF)	VIC	Viking integrated change	WCSC	West Coast Switching Center (JPL support for NASCOM)
		VID	Video Image Display Assembly (SFOF)	WDT	watch dog timer
		VIS	Visual Imagery System (VOS)	W/F	wow and flutter
		VKF	von Karman gas dynamic facility	WG	waveguide
		VL	Viking Lander		
		VLBI	very long baseline interferometry		
		VLC	Viking Lander Capsule		
		VLF	very low frequency (3 to 30 kHz)		

USAF/NRD	United States Air Force, National Range Division (Andrews Air Force Base, Md, and Patrick Air Force Base, Fla)	VLS	Viking Lander System	WGDC	waveguide directional coupler
		VNG	Frequency and Time Broadcasting Station, Lindherst, Victoria, Australia	WHOI	Woods Hole Oceanographic Institution
USB	Unified S-Band System	VO	Viking Orbiter (VOS)	WIN	Work Incentive Program
USB	upper sideband	VOCA	Voice Communications Assembly (GCF)	WPM	words per minute
USI	User Software Integration Subsystem (SFOF)	VODC	Viking Orbiter Design Change (VOS)	WRE	Weapons Research Establishment (Australian Department of Supply)
USNO	United States Naval Observatory	VOS	Viking Orbiter System	WS	Wallops Station (Wallops Island, Va.)
USP	Urban Studies Project	VOX	voice-operated transmission	WS	word sync
USR	User Service Request	VPO	Viking Project Office	WSMR	White Sands Missile Range
USRA	Universities Space Research Association	VPS	Vernier Propulsion System	WSMTC	White Sands Missile Test Center (White Sands, N.M.)
UT	umbilical tower	VR	voltage regulator	WSTF	White Sands Test Facility
UT	Universal Time (appended numerals indicate corrections applied)	VRCA	Voice Recording Assembly (GCF)	WT	wind tunnel
		VRCC	Vandenberg Communications Control Center	WTR	(see AFWTR)
UTC	Universal Time Code	VRS	Voice Recording Subsystem	WUE	Work Unit Engineer
UTC	United Technology Center, Inc	VRU	velocity reference unit	WUIS	Work Unit Information System (DOD)
UTD	User Terminal and Display Sub-system (SFOF)	VSA	velocity sensor antenna		Work Unit Manager
UTM	universal transverse Mercator	VS	vestigial sideband	WUM	Work Unit Manager
UV	ultraviolet	V-S/C	Viking Spacecraft	WWV	National Bureau of Standards Broadcasting Station, Ft. Collins, Colorado (2.5, 5.0, 10.0, 15.0 and 25.0 MHz)
UVS	ultraviolet spectrometer	VSCF	variable-speed constant-frequency		
UWV	Antenna Microwave Subsystem (DSIF)	VSD	video subcarrier detector	WWVB	National Bureau of Standards Broadcasting Station, Ft. Collins, Colorado (60 kHz)
V	voice data	VSO	very stable oscillator		
VAB	Vehicle Assembly Building	VSS	video storage subsystem	WWVH	National Bureau of Standards Broadcasting Station, Kauai, Hawaii (2.5, 5.0, 10.0 and 15.0 MHz)
VAC	volts alternating current	VST	Video System Test		
VAN	Vanguard (Apollo Ship)	VSWR	voltage standing wave ratio		
		VT	variable-time (fuse)		
		VTR	video tape recorder		

WWVL National Bureau of Standards
Experimental Broadcasting Station,
Ft. Collins, Colorado (20 kHz)
XA ground transmitter VCO frequency
for S/C receiver best lock, doppler
compensated
X-band frequency band between 5.2 and
10.9 GHz
XCE X-band Cassegrain Experimental
(feed cone)
xcvr transceiver
xfr transfer

XM experimental model
xmit transmit
xmtr transmitter
xpndr transponder
XRD X-ray diffractometer
XRPM Experimenter's Data Reformatting
(computer program)
XRPT Experimenter's Data Reformatting
Program for System Test Data
(computer program)
xtal crystal

XTM experimental test model
XTX X-band transmitter
x-y x axis - y axis (type of antenna
mounting)
YIG yttrium iron garnet
Z Zulu Time (GMT)
ZDD zero delay device
ZEPL zero excess propellants line
ZF zero frequency
ZST Zone Standard Time
ZWC zero word count

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